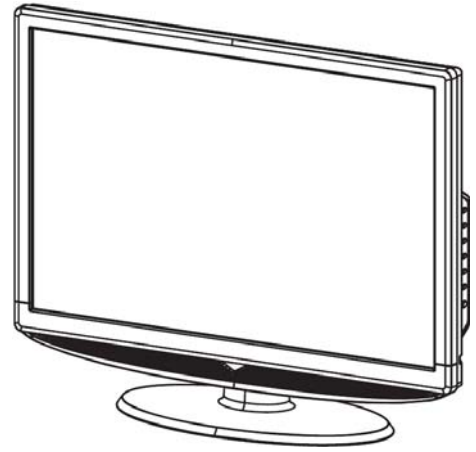


Service  
Service  
Service



# Service Manual

Horizontal Frequency  
31~60 kHz

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## SAFETY NOTICE

ANY PERSON ATTEMPTING TO SERVICE THIS CHASSIS MUST FAMILIARIZE HIMSELF WITH THE CHASSIS  
AND BE AWARE OF THE NECESSARY SAFETY PRECAUTIONS TO BE USED WHEN SERVICING  
ELECTRONIC EQUIPMENT CONTAINING HIGH VOLTAGES.

CAUTION: USE A SEPARATE ISOLATION TRANSFORMER FOR THIS UNIT WHEN SERVICING

## **Important Safety Notice**

Proper service and repair is important to the safe, reliable operation of all AOC Company Equipment. The service procedures recommended by AOC and described in this service manual are effective methods of performing service operations. Some of these service operations require the use of tools specially designed for the purpose. The special tools should be used when and as recommended.

It is important to note that this manual contains various CAUTIONS and NOTICES which should be carefully read in order to minimize the risk of personal injury to service personnel. The possibility exists that improper service methods may damage the equipment. It is also important to understand that these CAUTIONS and NOTICES ARE NOT EXHAUSTIVE. AOC could not possibly know, evaluate and advise the service trade of all conceivable ways in which service might be done or of the possible hazardous consequences of each way. Consequently, AOC has not undertaken any such broad evaluation. Accordingly, a servicer who uses a service procedure or tool which is not recommended by AOC must first satisfy himself thoroughly that neither his safety nor the safe operation of the equipment will be jeopardized by the service method selected.

Hereafter throughout this manual, AOC Company will be referred to as AOC.

### **WARNING**

Use of substitute replacement parts, which do not have the same, specified safety characteristics might create shock, fire, or other hazards.

Under no circumstances should the original design be modified or altered without written permission from AOC. AOC assumes no liability, express or implied, arising out of any unauthorized modification of design.

Servicer assumes all liability.

### **FOR PRODUCTS CONTAINING LASER:**

DANGER-Invisible laser radiations when open AVOID DIRECT EXPOSURE TO BEAM.

CAUTION-Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

CAUTION -The use of optical instruments with this product will increase eye hazard.

TO ENSURE THE CONTINUED RELIABILITY OF THIS PRODUCT, USE ONLY ORIGINAL MANUFACTURER'S REPLACEMENT PARTS, WHICH ARE LISTED WITH THEIR PART NUMBERS IN THE PARTS LIST SECTION OF THIS SERVICE MANUAL.

Take care during handling the LCD module with backlight unit

- Must mount the module using mounting holes arranged in four corners.
- Do not press on the panel, edge of the frame strongly or electric shock as this will result in damage to the screen.
- Do not scratch or press on the panel with any sharp objects, such as pencil or pen as this may result in damage to the panel.
- Protect the module from the ESD as it may damage the electronic circuit (C-MOS).
- Make certain that treatment person's body is grounded through wristband.
- Do not leave the module in high temperature and in areas of high humidity for a long time.
- Avoid contact with water as it may a short circuit within the module.
- If the surface of panel becomes dirty, please wipe it off with a soft material. (Cleaning with a dirty or rough cloth may damage the panel.)

## Revision List

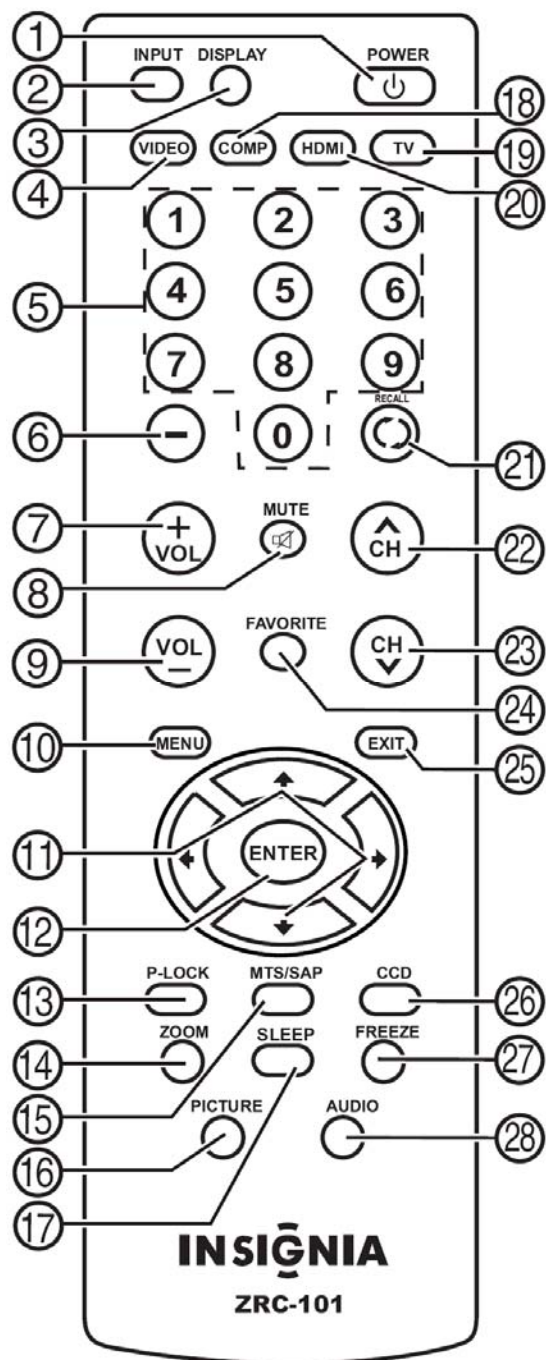
[illegible]

## 1. General Specification

Items		Specification	
LCD Panel	Panel Type	32" V315B1-L01 C2 TW panel	
	Driving system	TFT-LCD CMO Panel	
	Active Area	697.6845(H) x 392.256(V)	
	Resolutions	1366 x768	
	Brightness	500 cd/m²	
	Contrast	800:1	
	Pixel Pitch	0.51075mm x0.51075mm	
	Display colors	16.7 million	
	Color Temperature	Cool / Warm/normal	
TV Function	TV Standard	ATSC, NTSC	
	Color systems	ATSC,NTSC	
	Closed Caption / V-chip For USA		
Video Inputs	AV	RCA x 1	Audio L/R x 1
	S-Video	S-Video x 1	Audio L/R x 1
	COMPONENT	Y,Cb,Cr x 1	Audio channel L / Rx 1
	HDMI	720p,1080i,480p,480i	
Audio Output	Audio Output: L / R	Speaker (built-in): Two 10W speakers	
		Headphone Mini-jack for stereo (3.5ø)	
OSD language	English, etc		
Wall Mount	VESA 80 mm x 80 mm		
Power	Power Supply	AC100V~240V, 50/60Hz	
	Power Consumption	< 180W	
Environment	Operating	5 °C ~ 40 °C	
	Storage	0 °C ~ 50 °C	
	Operating	10% ~ 85%	

## 2. Operating Instructions

### 2.1 The Use of Remote Control



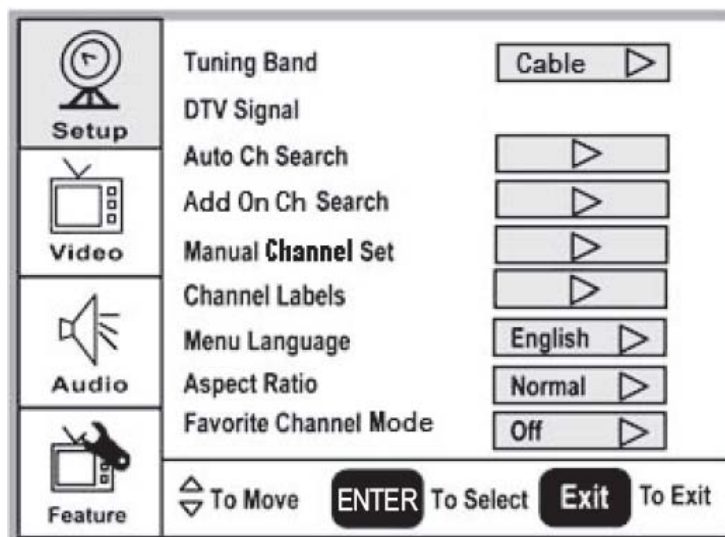
#	Button	Description
1	POWER	Press to turn on your TV or put it into Standby mode.
2	INPUT	Press to select the video input signal source.
3	DISPLAY	Press to display status information.
4	VIDEO	Press to toggle between S-Video and composite source modes.
5	Number buttons	Press to enter channel numbers. In the on-screen menu, press to enter your parental control password.
6	-	Use with the 0-9 number buttons and <b>ENTER</b> button to select digital channels.
7	VOL +	Press to increase the volume.
8	MUTE	Press to mute the sound. Press again to restore the sound.
9	VOL -	Press to decrease the volume.
10	MENU	Press to open the on-screen menu.
11		Press to move down, up, left, or right in the on-screen menu.
12	ENTER	Press to confirm changes or to turn options on and off in the on-screen menu.
13	P.LOCK	Press to activate or deactivate parental controls. See "Setting parental controls" on page 8 for information on setting up parental controls.

#	Button	Description
14	ZOOM	Press to select the display aspect ratio.
15	MTS/SAP	Press to select one of the preset audio modes. In analog TV mode, you can select <b>MONO</b> , <b>STEREO</b> , or <b>SAP</b> (secondary audio program). In digital TV (DTV) mode, you can select the audio language, if more than one language is available.
16	PICTURE	Press to select the <b>Brightness</b> and <b>Contrast</b> setting. You can adjust the brightness and contrast without opening the on-screen menu.
17	SLEEP	Press to set the sleep timer. For more information, see "Setting the sleep timer" on page 7.
18	COMP	Press to select the component source mode.
19	TV	Press to select the ATSC (digital), or NTSC (analog) TV source.
20	HDMI	Press to select the HDMI mode.
21	⏮ RECALL	Press to watch the previous channel.
22	CH ⬆	Press to tune to the next higher channel in the channel list.
23	CH ⬇	Press to tune to the next lower channel in the channel list.
24	FAVORITE	Press to toggle the Favorite/Normal mode. See "Setting up the channel list" on page 6 for more information.
25	EXIT	Press to close the on-screen menu.
26	CCD	Press to turn closed captions on and off. For more information, see "Viewing closed captions" on page 8.
27	FREEZE	Press to freeze the video image. Press again to unfreeze the image. Do not freeze the video image for long periods of time. You may damage the TV screen.
28	AUDIO	Press to select the <b>Bass</b> or <b>Treble</b> setting. You can adjust the bass or treble without opening the on-screen menu.

## 2.2 To Use the Menus

- 1 Press the **MENU** button.
- 2 Press the  $\nabla$  or  $\triangle$  button repeatedly to select a menu item.
- 3 Press the  $<$  or  $>$  buttons to enter a sub-menu.
- 4 Press the **ENTER** or  $>$  button to confirm an adjustment or toggle a setting.
- 5 Press **MENU** or **EXIT** to close the on-screen menu.

### MAIN MENU



### On-screen menus

On-screen menu	Options
Setup	<p><b>Tuning Band</b>—Selects the TV antenna source (Air or Cable).</p> <p><b>DTV Signal</b>—Displays the digital TV signal strength. For more information.</p> <p><b>Auto Ch Search</b>—Automatically sets up a list of the channels available in your area.</p> <p><b>Add On Ch Search</b>—Lets you add new channels without going through the entire list of available channels.</p> <p><b>Manual Ch Set</b>—Lets you add or delete channels from the channel list.</p> <p><b>Channel Labels</b>—Lets you add a label to a channel. For more information.</p> <p><b>Menu Language</b>—Selects the language for the on-screen menu. You can select English, French, or Spanish.</p> <p><b>Aspect Ratio</b>—Selects the screen aspect ratio: Normal, Wide, Zoom, or Cinema. You can also press ZOOM to select the aspect ratio.</p> <p><b>Favorite Channel mode</b>—Lets you edit your favorite channel list. Press <b>FAVORITE</b> on the remote to toggle this mode on or off.</p>
Video (Options may vary in different modes.)	<p><b>Contrast</b>—Increases the picture level to adjust the white areas of the picture. Decreases the picture level to adjust the black areas of the picture. (0 ~ 100)</p> <p><b>Brightness</b>—Increases the brightness to add more light to dark areas of the picture. Decreases the brightness to add more dark to light areas of the picture. (0 ~ 100)</p> <p><b>Sharpness</b>—Increases the sharpness for a cleaner and clearer image. Decreases the sharpness for a smoother picture. (-50 ~ 50)</p>

	<p><b>Color</b>—Adjusts the overall color of the picture. (0 ~ 100)</p> <p><b>Tint</b>—Increases the color level to add more green to skin tones. Decreases the color level to add more purple to skin tones. (R50 ~ G50)</p> <p><b>Backlight</b>—Adjusts the backlight level (0 ~ 10).</p> <p><b>Settings</b>—Restores the video settings to factory default.</p>
<p><b>Audio</b> (Options may vary in different modes.)</p>	<p><b>Audio Language</b>—Selects an alternate language if the program has more than one language available. Only available in ATSC TV mode.</p> <p><b>Bass</b>—Adjusts the low sounds (bass).</p> <p><b>Treble</b>—Adjusts the high sounds (treble).</p> <p><b>Balance</b>—Adjusts the right and left speaker volumes.</p> <p><b>Digital Audio Output</b>—Selects the audio mode for the digital audio optical jack.</p> <ul style="list-style-type: none"> <li>• RAW: AC-3 in - AC-3 out/PCM in – PCM out.</li> <li>• PCM: AC-3 in - PCM out/PCM in – PCM out.</li> </ul> <p><b>TV Speaker</b>—Turns the internal TV speaker On (default) or Off. Does not affect the digital audio output, the headphone output, and the composite audio output.</p> <p><b>Settings</b>—Restores the audio settings to factory default.</p>
<p><b>Feature</b></p>	<p><b>Time Set</b>—Sets the clock. For more information</p> <p><b>Sleep Timer</b>—Sets the sleep timer.</p> <p><b>Advanced Video Set</b>—</p> <ul style="list-style-type: none"> <li>• Noise Reduction—Select from Low, Mid, High, and Off.</li> <li>• Color Temperature—Select from Normal, Warm, and Cool (default).</li> <li>• 3D Y/C—Choose from On (default) or Off.</li> <li>• Dynamic Contrast—Choose from On or Off (default).</li> <li>• Setting—Restores the settings to factory default.</li> </ul> <p><b>Password Set</b>—Lets you set the password for parental control options. The default password is 0000.</p> <p><b>Parental Control</b>—Accesses V-chip controls.</p> <p><b>Digital Caption</b>—Sets the digital caption type. Choose from Service 1-6, Text 1-4, and CC 1-4.</p> <p><b>Closed Caption Options</b>—Customizes closed captions for digital broadcasting systems. You can adjust Size, Font, Text Color, Text Opacity, Background Color, Background Opacity, Edge Effect, and Edge Color.</p> <p><b>Component Set</b>—Only available in component mode. Lets you set Horizontal Position (1 ~ 100), Vertical Position (1 ~ 100), and Phase (1 ~ 100). The Settings option restores the settings to factory default.</p> <p><b>VGA Set</b>—Only available in VGA mode. Lets you set Horizontal Position (1 ~ 100), Vertical Position (1 ~ 100), Clock (1 ~ 100), and Phase (1 ~ 100). You can also select Auto Adjust to automatically adjust the settings. The Settings option restores the settings to factory default.</p> <p><b>Input Label</b>—Lets you change the input label.</p>



## USING YOUR TV

### To turn your TV on and off:

- 1 Make sure that the power cord is connected to your TV and a power outlet.
- 2 Press the **POWER** button to turn on your TV. The power indicator LED turns blue.
- 3 Press the **POWER** button again to return your TV to standby. The power indicator LED turns red.

### To select the TV signal source:

- With the TV on, press the **INPUT** button on either the TV or the remote to choose from:

- **TV**
- **Composite Rear**
- **Composite Side**
- **S-Video Rear**
- **S-Video Side**
- **Component1**
- **Component2**
- **VGA**
- **HDMI1**
- **HDMI2**
- **HDMI3**

Press **VIDEO** to choose between **Composite** and **S-Video**.

Setting up the channel list:

After you select your TV source, if you selected antenna or cable you need to set up the channel list. When you set up your channel list, your TV searches for all available channels in your area and store a list of these channels.

When you press the **CH ^** or **CH v** buttons, your TV skips the channels that do not have a signal.

### To automatically set up the channel list:

- 1 Press the **MENU** button. The Main on-screen display menu opens with **Setup** highlighted.
- 2 Press the **>** button to enter the sub-menu, then **▽** or **△** button to highlight **Auto Ch Search**.
- 3 Press **ENTER** or **>** to start the search.

### Manually adding or deleting channels from the channel list

After you create a channel list using the **Auto Ch Search** option, you can manually add or delete channels from the channel list.

#### To add or delete channels:

- 1 Press the **MENU** button. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press the **>** button to enter the sub-menu, then **▽** or **△** to highlight **Manual Channel Set**. The Channel Setup Table opens.
- 3 Press the **▽** or **△** button to select a channel, then press then press **ENTER** to toggle between viewable and not viewable.
- 4 Press **MENU** or **EXIT** to close the menu.

### To change channels:

- Press the **CH v** or **CH ^** button on the remote control to go to the next lower or higher channel. Or Press the

number buttons to directly select a channel (for example, if you want channel 83, press **8**, then press **3**). Or Press the **RECALL** button to go to the last viewed channel.

### Selecting a digital sub-channel

Most digital TV channels have more than one channel. The main channel carries the signal for the main TV program. The sub-channels carry signals for additional or alternate programming, such as a radio or news broadcast. For example, if the main channel number is 8, the sub-channel number might be 8-1, 8-2, or 8-3.

#### To select a sub-channel:

- 1 Press the number buttons for the main channel (for example 8).
- 2 Press the **–** button, and then press the sub-channel button (for example 1).

#### To adjust the volume:

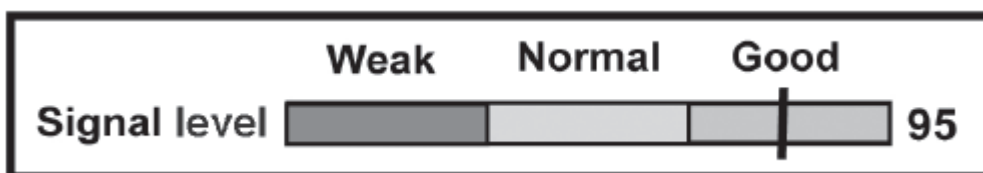
- Press the **VOL –** or **VOL +** button to decrease or increase the volume.
- Press the **MUTE** button to turn off the sound. Press the **MUTE** button again to turn the sound back on.

#### To display status information:

- Press the **DISPLAY** button. Your TV displays status information, such as the channel number or signal source.

#### To check the DTV signal strength:

- 1 Press the **MENU** button. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press the **>** button to enter the sub-menu, then **▽** or **△** to highlight **DTV Signal**. The DTV Signal meter opens.



- 3 Press **MENU** or **EXIT** to close the menu.

#### To add a label to a channel:

- 1 Press the **MENU** button. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press the **>** button to enter the sub-menu, then **▽** or **△** to highlight **Channel Labels**. The Channel Label menu opens.
- 3 Press the **<** or **>** button to move the cursor to the channel field or label field, and then press the **▽** or **△** button to select.
- 4 Press **<** or **>** to move the cursor to the label field, then press **▽** or **△** to select the character.
- 5 Press the **ENTER** key to return to the previous menu.

### Freezing the picture

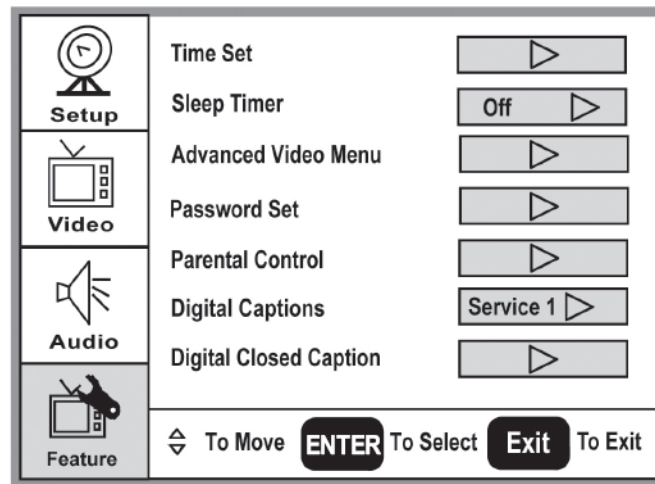
You can freeze (still) the screen image.

#### To freeze or unfreeze the picture:

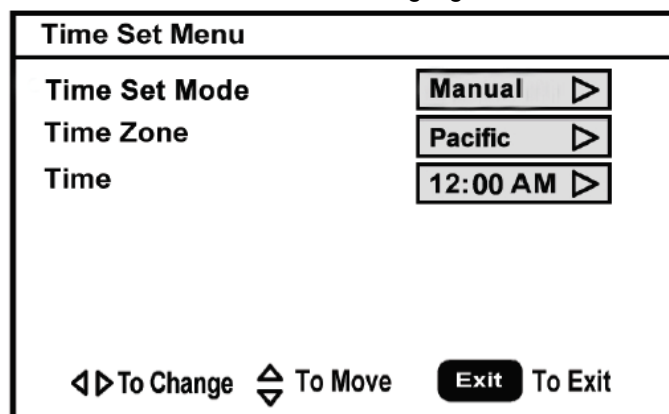
- Press the **FREEZE** button.

**To set the clock:**

- 1 Press the **MENU** button. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press the ▽ or △ button repeatedly to highlight **Feature**. The Feature menu opens.



- 3 Press the > button to enter the sub-menu, then ▽ or △ to highlight **Time Set**. The Time Set menu opens.



- 4 Press the ▽ or △ button move to the different fields, then press < or > to change the settings.
- 5 Press **MENU** or **EXIT** button to close the menu.

**To set the sleep timer:**

- 1 Press the **MENU** button. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press the ▽ or △ button repeatedly to highlight **Feature**. The Feature menu opens.
- 3 Press the > button to enter the sub-menu, then ▽ or △ to highlight **Sleep Timer**.
- 4 Press < or > to select the amount of time (**Off, 5 min, 10 min, 15 min, 30 min, 45 min, 60 min, 90 min, 120 min, 180 min, 240 min**). To turn off the timer, select **off**.

**To view closed captions:**

- Press the **CCD** button repeatedly to select a closed caption option. You can select:
  - On
  - Off
  - On When Mute

**Setting parental controls**

Your TV has a V-chip that lets you control the type of programs your children can watch. Parental controls include two ratings: MPAA (based on age) and TV Parental Guidelines (based on content and age). A TV program may have an MPAA or TV Parental Guidelines rating, so you should set controls for both ratings. Before you can select ratings, you need to set up a parental controls password.

**To set up a password:**

- 1 Press the **MENU** button. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press the ▽ or △ button repeatedly to highlight **Feature**. The Feature menu opens.
- 3 Press the > button to enter the sub-menu, then ▽ or △ to highlight **Password Set**.
- 4 Press the number buttons to enter the old password. If you have not set a password, enter 0000. Press **ENTER** to continue.

Enter Old Password			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- 5 Press the number buttons to enter a new password. Press **ENTER** to continue.

Enter New Password			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- 6 Press the number buttons to enter the new password again, to confirm. Press **ENTER** to continue.

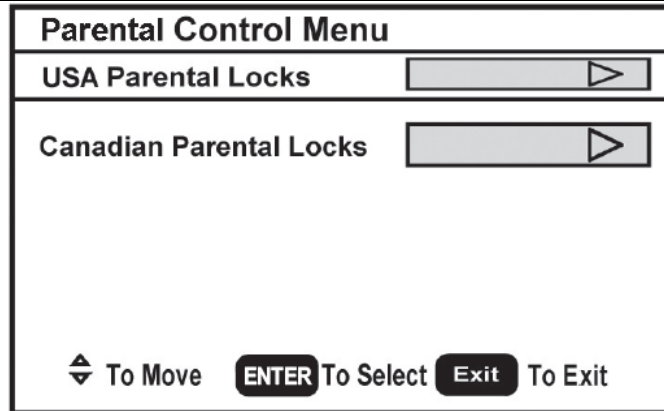
Confirm New Password			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

**To set the Parental Control level:**

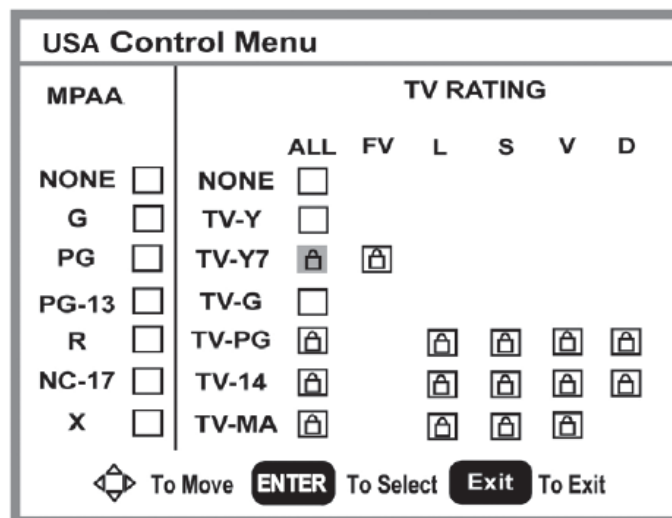
- 1 Press the **MENU** button. The Main OSD (On-Screen Display) menu opens with **Setup** highlighted.
- 2 Press the ▽ or △ button repeatedly to highlight **Feature**. The Feature menu opens.
- 3 Press the > button to enter the sub-menu, then ▽ or △ to highlight **Parental Control**. The Password screen opens.

Enter Password			
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

- 4 Press the number buttons to enter the password. Press **ENTER** to continue. The Parental Control Menu opens.



5 Press the  $\nabla$  or  $\triangle$  button to select **USA Parental Locks** or **Canadian Parental Locks**, then press **ENTER**. The Controls Menu that you have selected opens.



6 Press  $<$  or  $>$ , or  $\nabla$  or  $\triangle$  to move to a rating, then press **ENTER** to select the rating. When you block a rating, that rating and all higher ratings are blocked.

7 Press **MENU** or **EXIT** button to close the menu.

#### American MPAA ratings

Rating	Description
NONE	Not rated.
G	General audiences.
PG	Parental guidance suggested. Some material may not be suitable for children.
PG-13	Parental guidance strongly suggested. Some material may not be suitable for children under 13 years of age.
R	Restricted. Not suitable for children under 17 years of age unless accompanied by a parent or guardian.
NC-17	Not suitable for children under 17 years of age.
X	Adults only.

#### Canadian MPAA Ratings

Rating	Description
C	Children.
C8+	Children 8 years and above.
G	General audience.
PG	Parental guidance suggested.
14+	14 years old and above.
18+	Adult programming.
X	Adults only.

**TV Parental Guidelines ratings**

Rating	Description
NONE	Not rated.
TV-Y	All children.
TV-Y7	Children over seven years of age.
TV-G	General audiences.
TV-PG	Parental guidance suggested.
TV-14	Parents strongly cautioned.
TV-MA	Mature audiences only.

Some of the age-based TV Parental Guidelines ratings also have content-based ratings.

Rating	Description
FV	Fantasy violence.
L	Adult language.
S	Sexual situations.
V	Violence.
D	Sexually suggestive dialog.

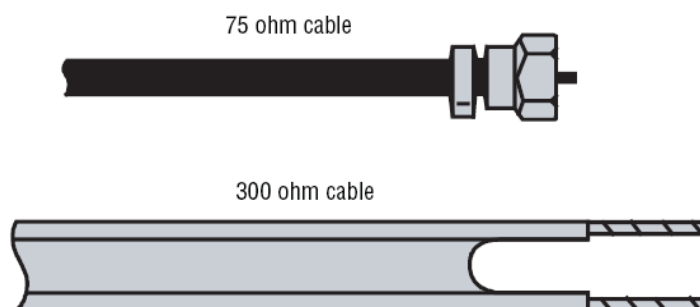
## 2.3 How to Connect

### Connecting your TV to a power outlet

- Plug the power cord into a power outlet.

### Connecting an outside antenna

Antenna cables come in two types: 75 ohm and 300 ohm.



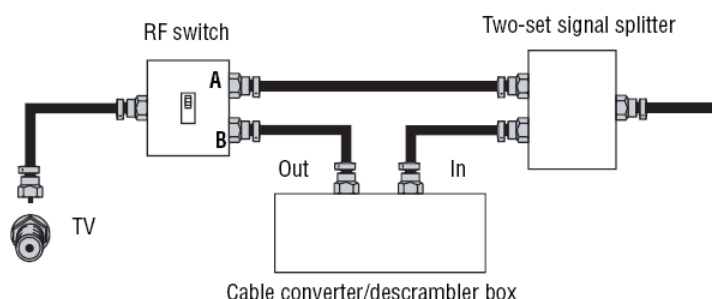
- If your antenna cable has a 75 ohm connector, connect the cable to the coaxial jack on the back of your TV.
- If your antenna cable has a 300 ohm connector, connect the cable to a 300-75 ohm adapter (not included), connect the adapter to a 75 ohm cable, then connect the other end of the 75 ohm connector to the coaxial jack on the back of your TV.

### To connect cable TV without a converter/descrambler box:

- 1 Connect one end of a 75 ohm cable to the coaxial jack on the back of your TV.
- 2 Connect the other end of the cable to the cable TV wall outlet.

### To connect cable TV with a converter/descrambler box:

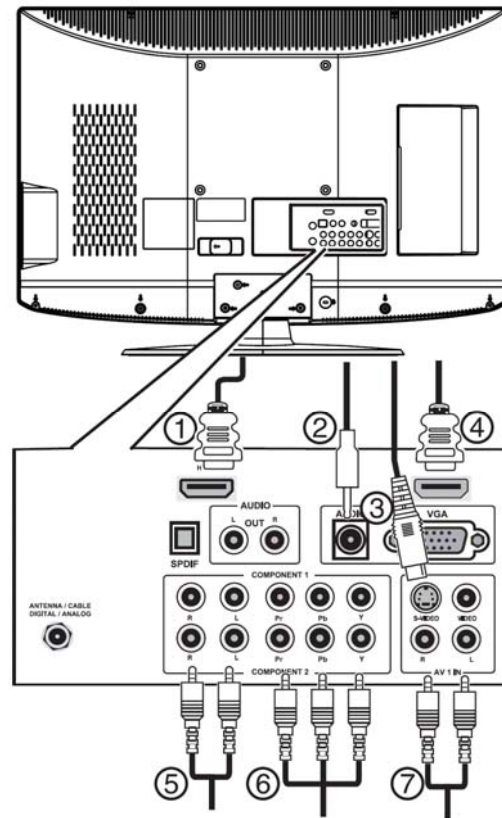
- Use the following illustration to connect a converter/descrambler box. (The RF switch and the signal splitter are not provided.) Set the RF switch to the A position to watch unscrambled channels using your TV remote control. Set the RF switch to the B position to watch scrambled channels using the converter/descrambler controls.



### To connect an external signal source:

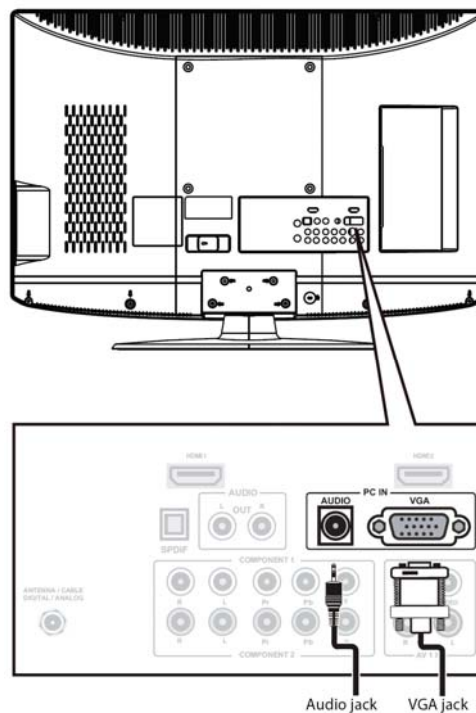
- 1 For composite video—plug the audio/video cable into the AUDIO L, AUDIO R (2), and VIDEO (7) in jacks on the back of your TV. - OR - For S-Video—Plug in the audio cables as described above, then plug one end of an S-Video (3) cable into the S-Video jack on the back of your TV and the other end into the S-Video jack on external signal source.
- OR - For component video—plug the Y, Pb, and Pr video cables and the Audio L and Audio R cables into the COMPONENT VIDEO IN (6) and AUDIO L/R (5) jacks on the back of your TV, then plug the other ends of the cables into the corresponding jacks on the external signal source.
- OR - For HDMI—plug one end of an HDMI cable into the HDMI1 INPUT (1) or HDMI2 INPUT (4) jack on the back of your TV, then plug the other end into an HDMI device.
- 2 Turn on your TV.
- 3 Press the INPUT button repeatedly to select the external signal source you want to watch.
- 4 Turn on external signal source.

5 Insert a disc or videotape into the external signal source, then press the **PLAY** button.



**To connect a computer using VGA:**

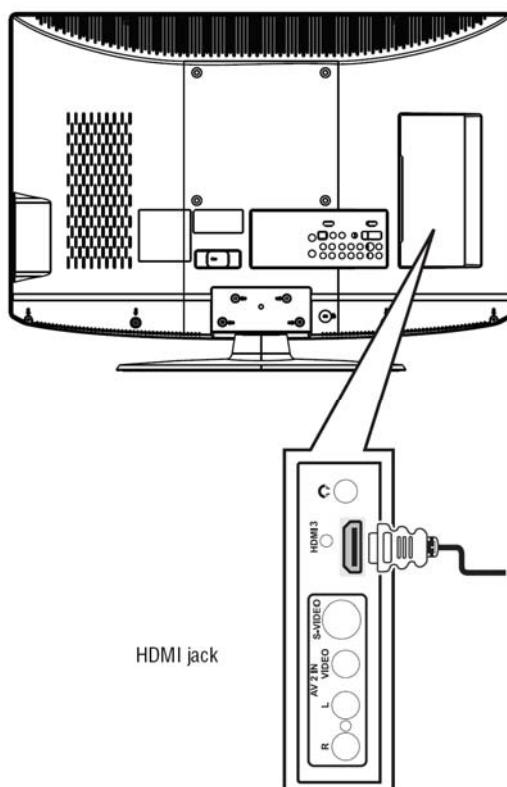
- 1 Plug a VGA cable from your computer into the VGA jack on the back of your TV.
- 2 Plug an audio cable from your computer's audio out jack into the AUDIO jack on the back of your TV.
- 3 Plug in and turn on your TV.
- 4 Press the INPUT button repeatedly to select VGA input source.



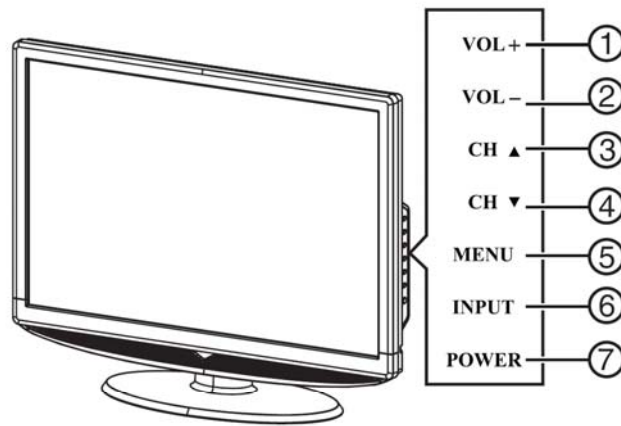


**To connect a computer using HDMI:**

- Plug an HDMI cable into the HDMI INPUT jack on the back of your TV and into the HDMI Out jack on the back of the computer.



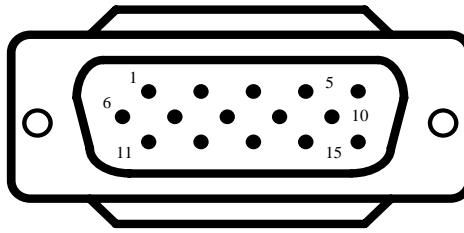
## 2.4 Front Panel Control Knobs



#	Button	Description
1	VOL+	Press to increase the volume. In Menu mode, functions as the right arrow to go to the next menu or increase a setting.
2	VOL-	Press to decrease the volume. In Menu mode, functions as the left arrow to go to a previous menu or decrease a setting.
3	CH ▲	Press to go to the next higher channel. In Menu mode, functions as the up arrow.
4	CH ▼	Press to go to the next lower channel. In Menu mode, functions as the down arrow.
5	MENU	Press to show the on-screen menu.
6	INPUT	Press to cycle through the available input sources. In Menu mode, functions as the <b>ENTER</b> button.
7	POWER	Press to turn on your TV or put it into Standby mode.

### 3. Input/Output Specification

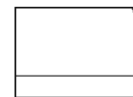
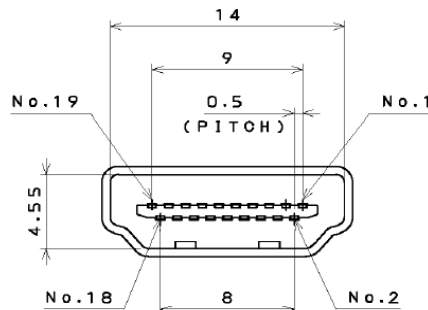
#### 3.1 RGB Signal input



15 - Pin Color Display Signal Cable

Pin No.	Description	Pin No.	Description
1	Red Video	9	Mandatory +5V Supply for PC Bypass
2	Green Video	10	Sync Ground
3	Blue Video	11	SDA(Remote Control)
4	SCL(Remote Control)	12	Bi-directional Data (SDA) for PC Bypass
5	Ground	13	H-Sync.
6	Red Video Ground	14	V-Sync.
7	Green Video Ground	15	Data Clock (SCL) for PC Bypass
8	Blue Video Ground		

#### 3.2 HDMI Digital connector pin assignments



Pin No.	Description	Pin No.	Description
1	TMDS Data2+	2	TMDS Data2 Shield
3	TMDS Data2-	4	TMDS Data1+
5	TMDS Data1 Shield	6	TMDS Data1-
7	TMDS Data0+	8	TMDS Data0 Shield
9	TMDS Data0-	10	TMDS Clock+
11	TMDS Clock Shield	12	TMDS Clock-
13	CEC	14	NC
15	SCL	16	SDA
17	DDC/CEC Ground	18	+5V Power
19	Hot Plug Detect		

## 3.3 AV/S-Video/Component Video Inputs

<b>AV (Composite Video input)</b>		
<b>Video1</b>		
	System	NTSC
	Amplitude	1.0 V (p-p), negative sync.
	Impedance	75 ohm terminated
<b>S-Video (Y / C input)</b>		
<b>S-Video2</b>		
	System	NTSC
	Y signal amplitude	1.0Vpp (including sync)
	C signal amplitude	0.286Vpp
	Impedance	75 ohm terminated
<b>Component (Y, Pb/Cb, Pr/Cr input)</b>		
<b>Video3</b>		
	System	1080i, 480p, 720p, 480i
	Y signal amplitude	1.0Vpp (including sync)
	Cr, (R-Y) / Cb, (B-Y) Signal amplitude	±0.35Vpp, 75 ohm
	Impedance	75 ohm terminated

## 3.4 Compatible Mode Table

VESA MODES							
Mode	Resolution	Total	Horizontal		Vertical		Nominal Pixel Clock (MHz)
			Nominal Frequency (KHz)	Sync Polarity	Nominal Freq. (Hz)	Sync Polarity	
VGA	640x480@60Hz	800 x 525	31.469	N	59.940	N	25.175
	640x480@72Hz	832 x 520	37.861	N	72.809	N	31.500
	640x480@75Hz	840 x 500	37.5	N	75	N	31.500
	720x400@70Hz	900 x 449	31.469	N	70.087	P	28.322
SVGA	800x600@56Hz	1024 x 625	35.156	P	56.25	P	36.000
	800x600@60Hz	1056 x 628	37.879	P	60.317	P	40.000
	800x600@72Hz	1040 x 666	48.097	P	72.188	P	40.000
	800x600@75Hz	1056 x 625	46.0875	P	75	P	49.5
XGA	1024x768@60Hz	1344x806	48.363	N	60.004	N	65.000
	1024x768@70Hz	1328x806	56.476	N	70.069	N	75.000
	1024x768@75Hz	1312x800	60.023	P	75.029	P	78.750
WXGA	1360x768@60Hz	1792x795	47.712	P	60.015	P	85.5

## 4. Mechanical Instructions

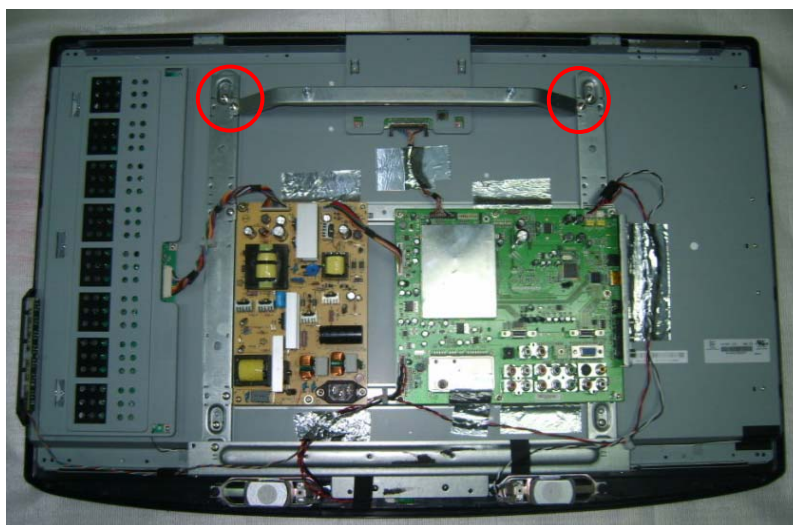
1. Remove the 2 screws to remove the stand.

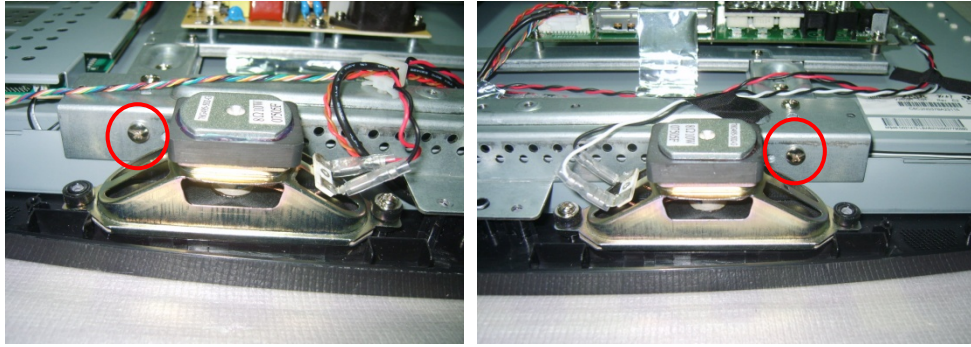


2. Remove 11 screws to remove the rear cover.



3. Remove 4 screws to remove the main frame.





4. Release the connectors.



5. Remove the speakers.

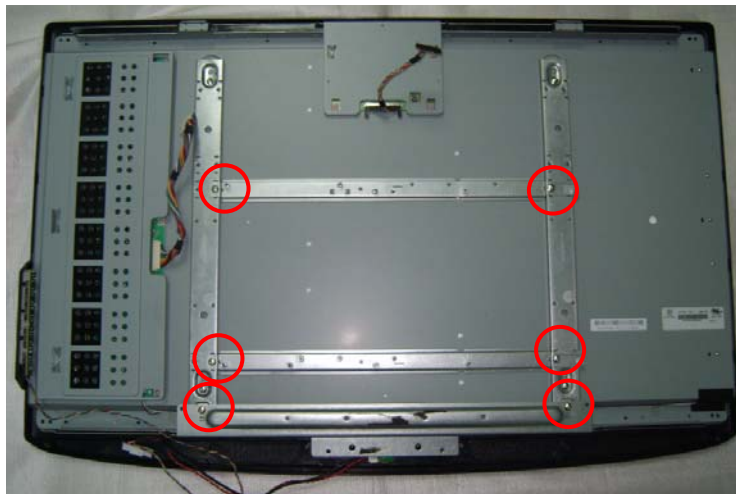


6. Remove the main board, power board





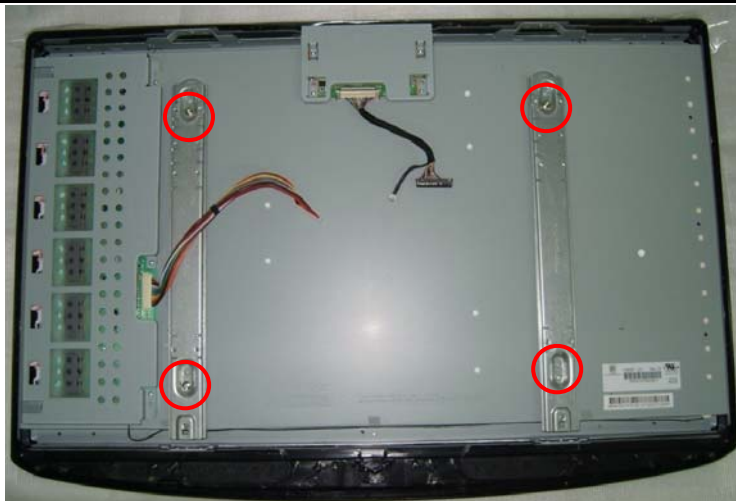
7. Remove the bkt-PCB-holder.



8. Release the key board and IR board.



9. Remove the BKT-panel-support.



10. Remove the bezel.



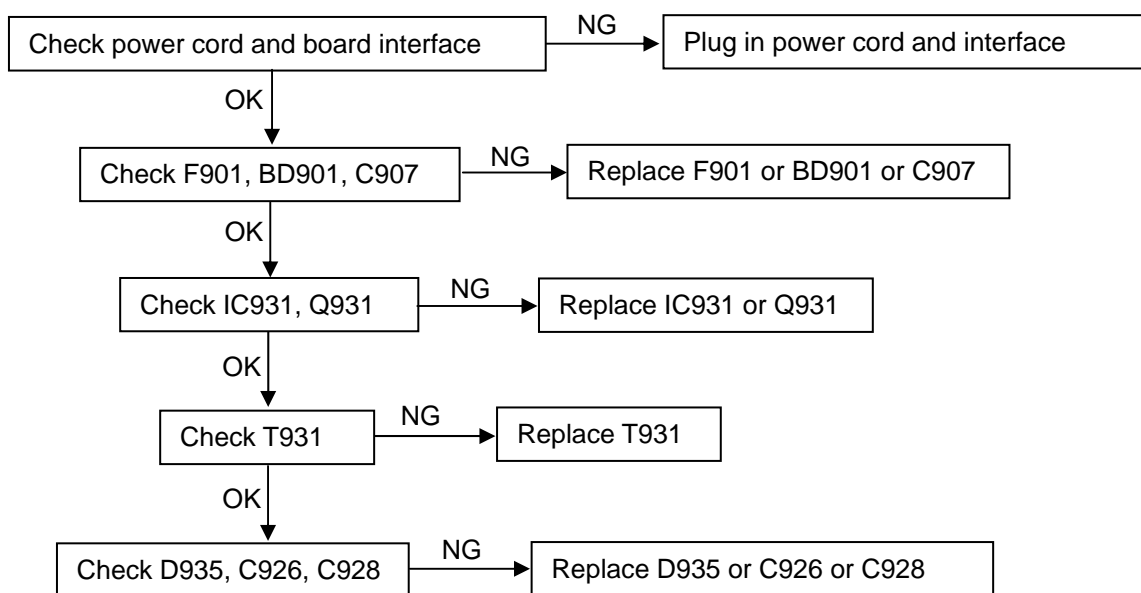
11. Remove the 6 screws to release the panel.



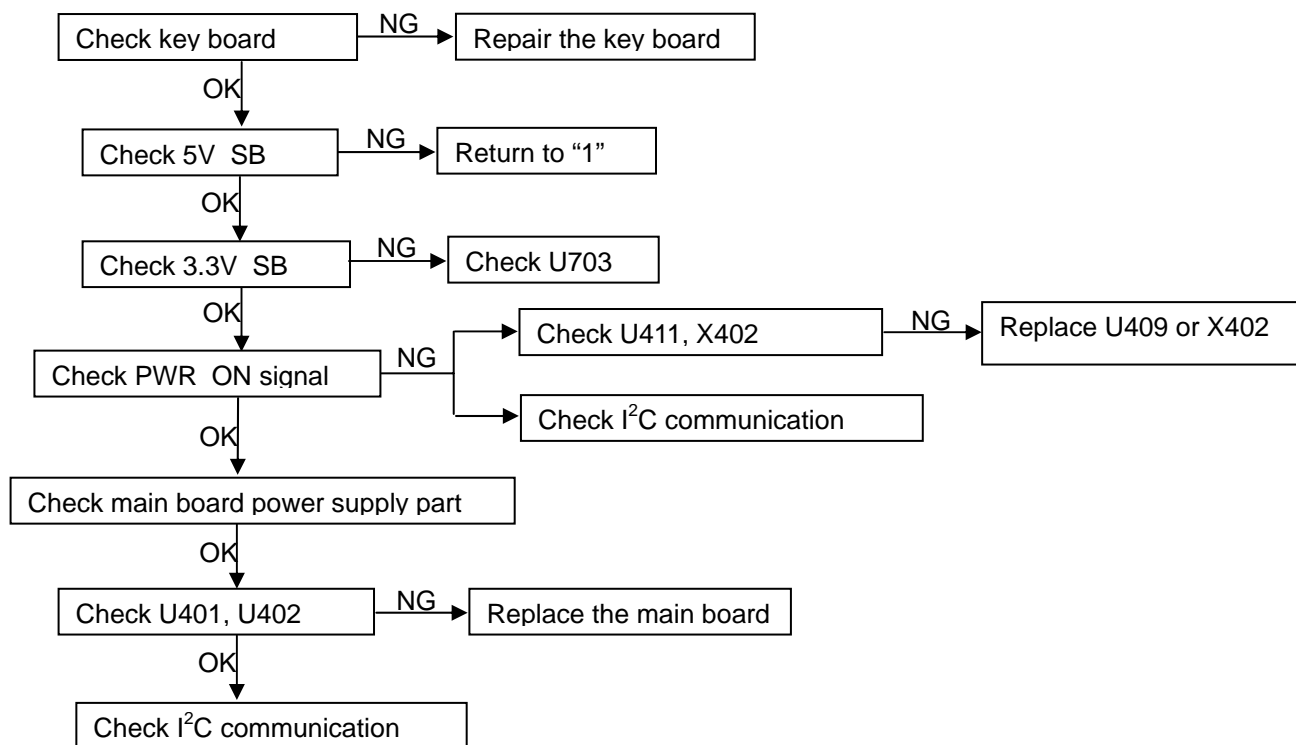


## 5. Repair Flow Chart

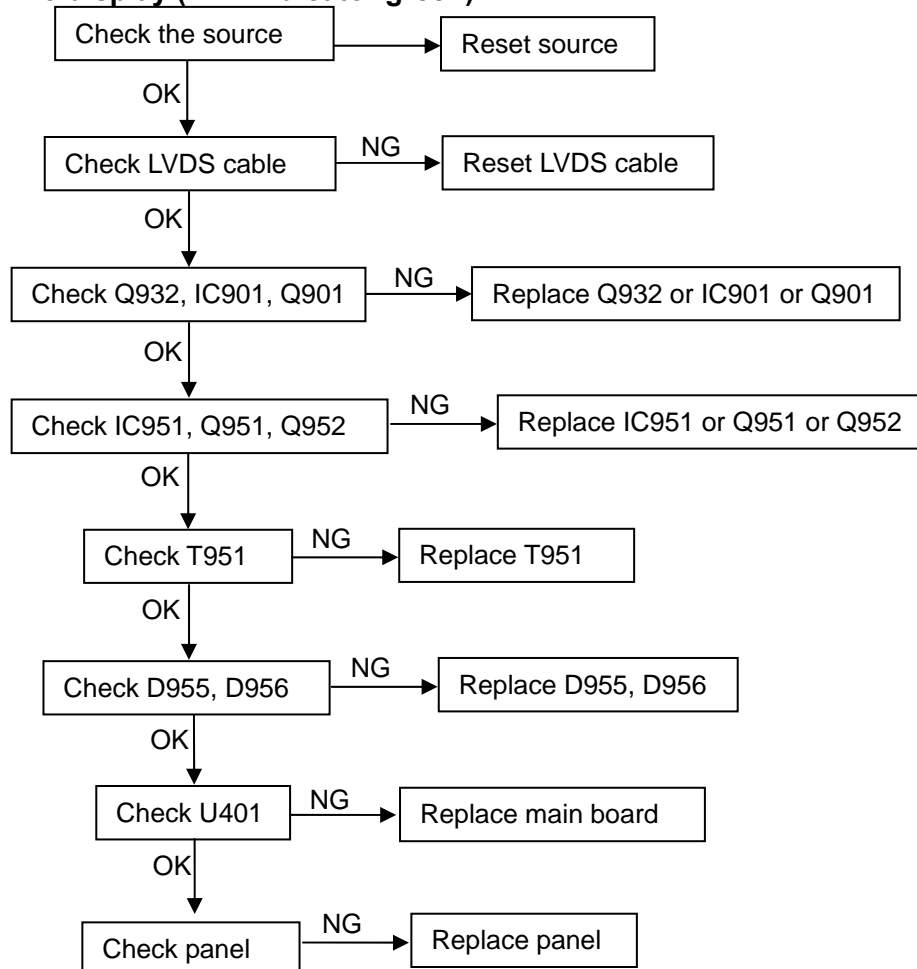
### 1. No Power (No LED indicator)

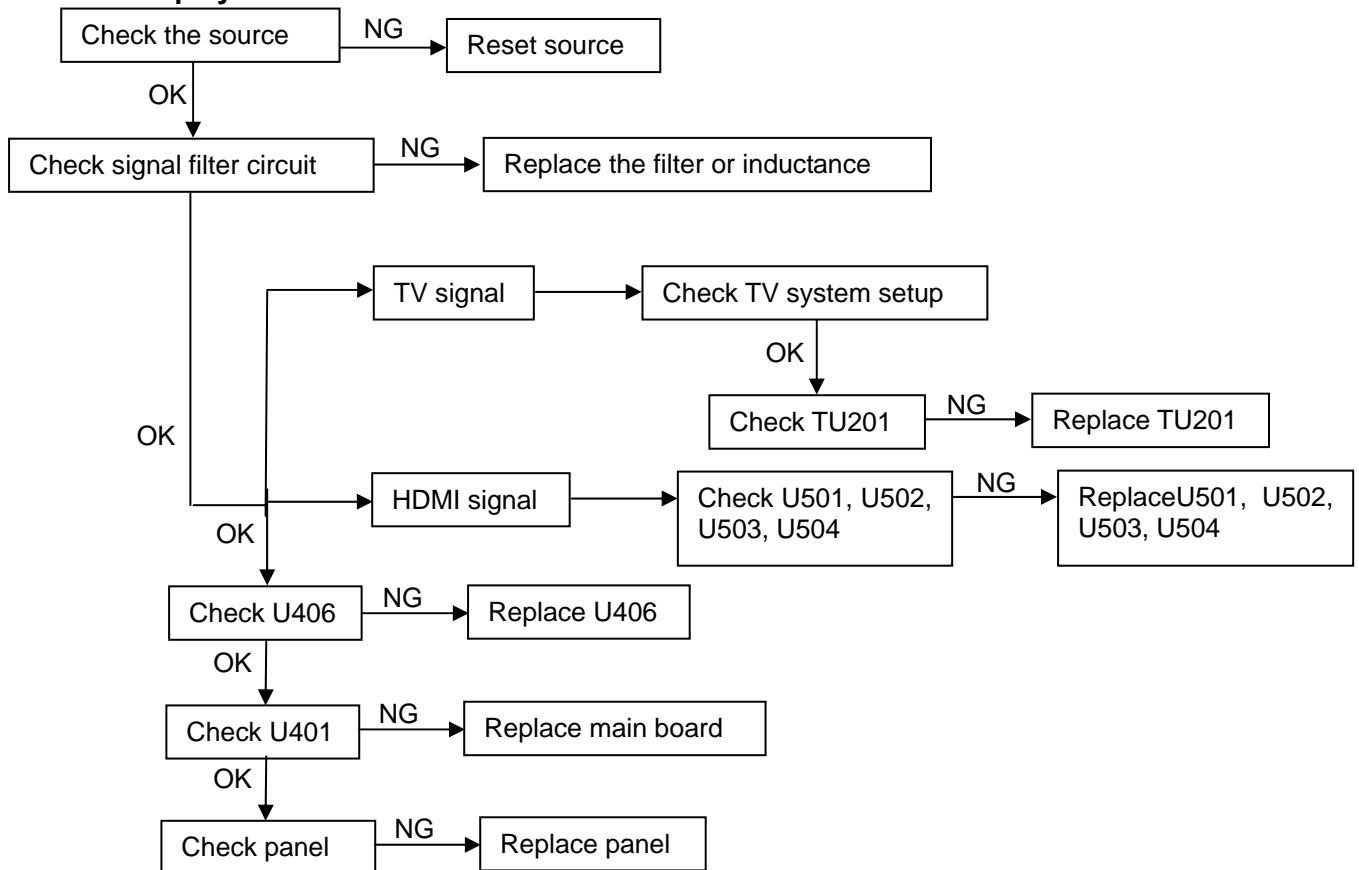


### 2. Can not start (LED indicator yellow)

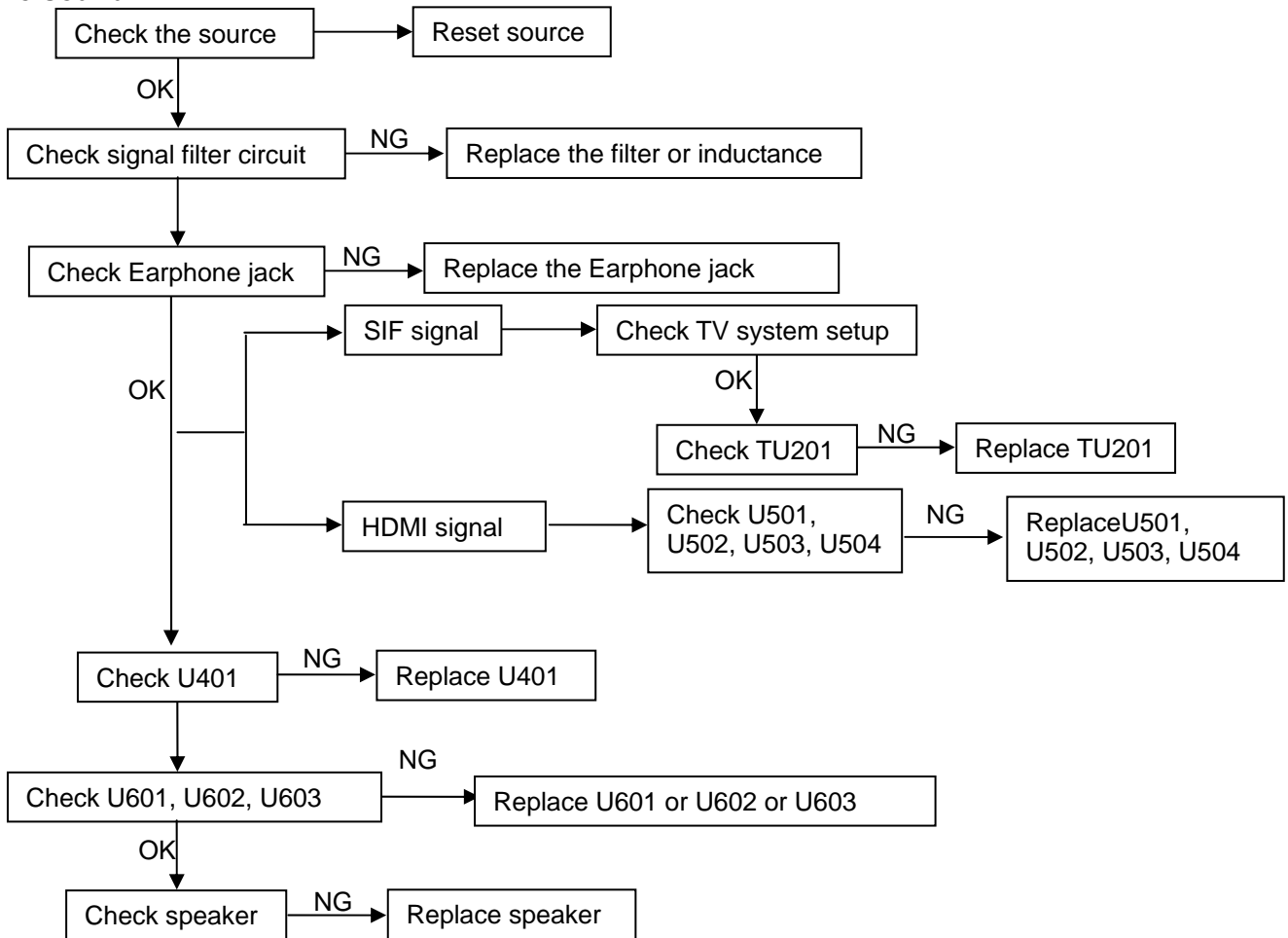


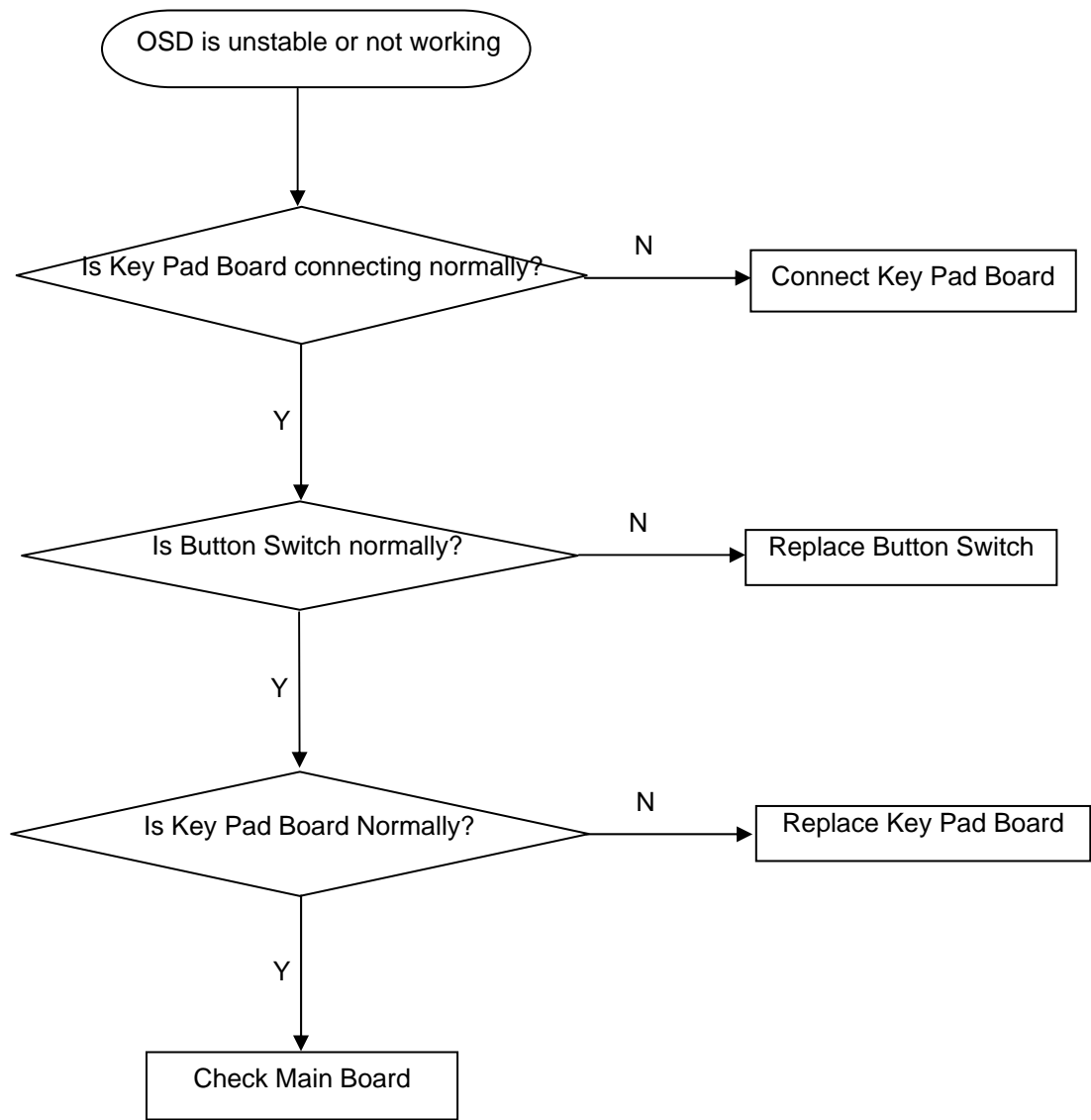
## 3. No display (LED indicator green)



**4. Abnormal display**

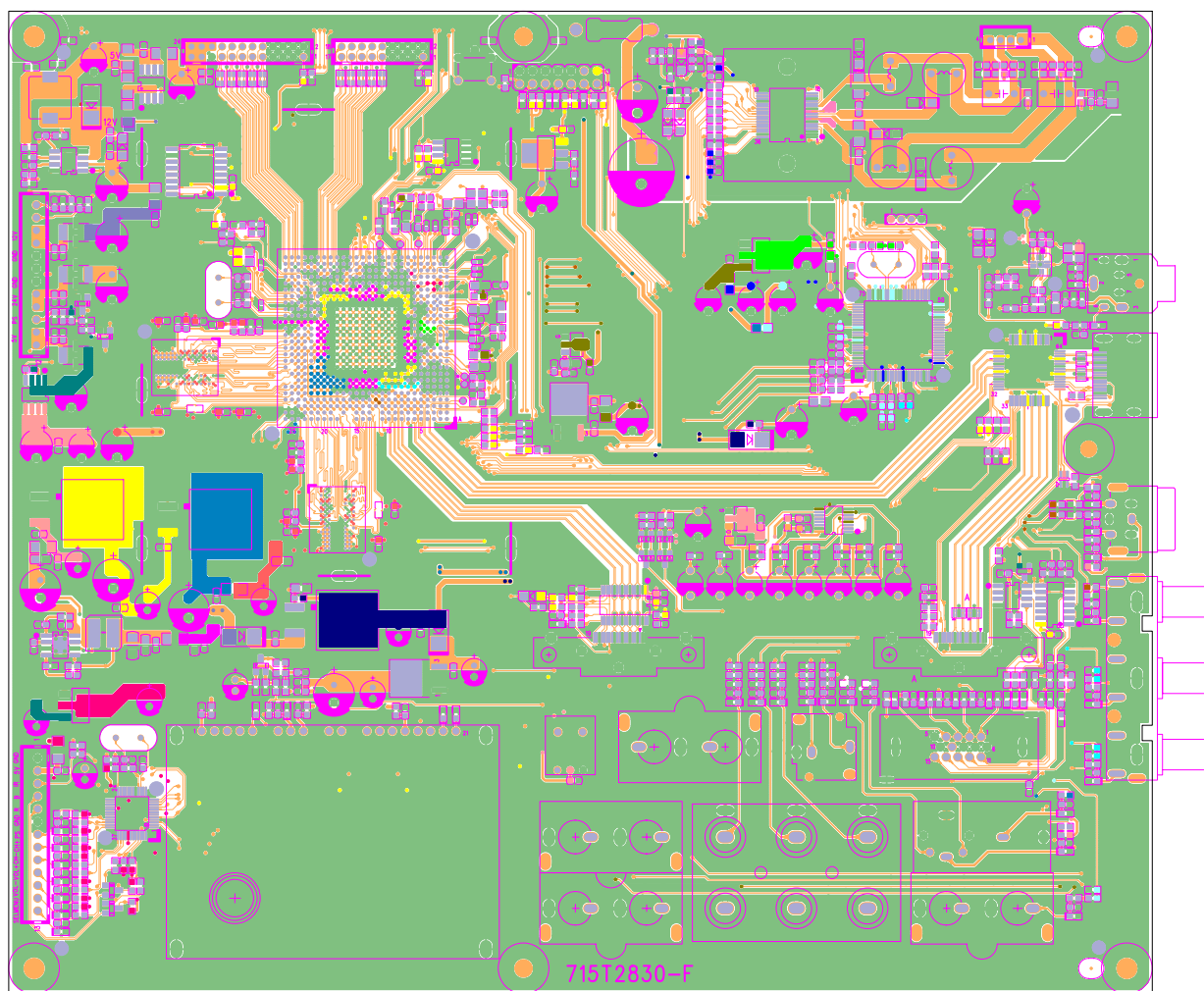
## 5. No sound

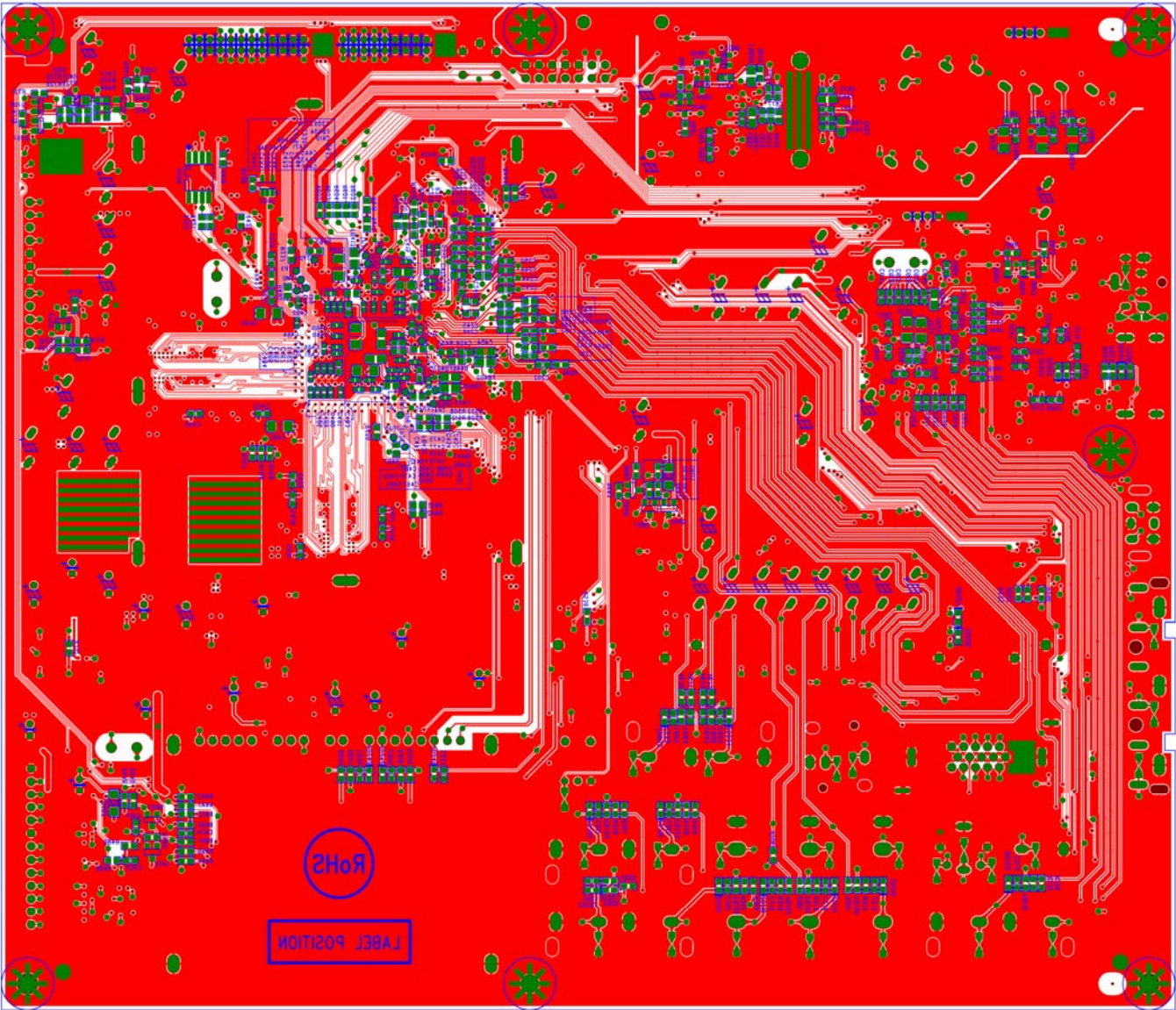


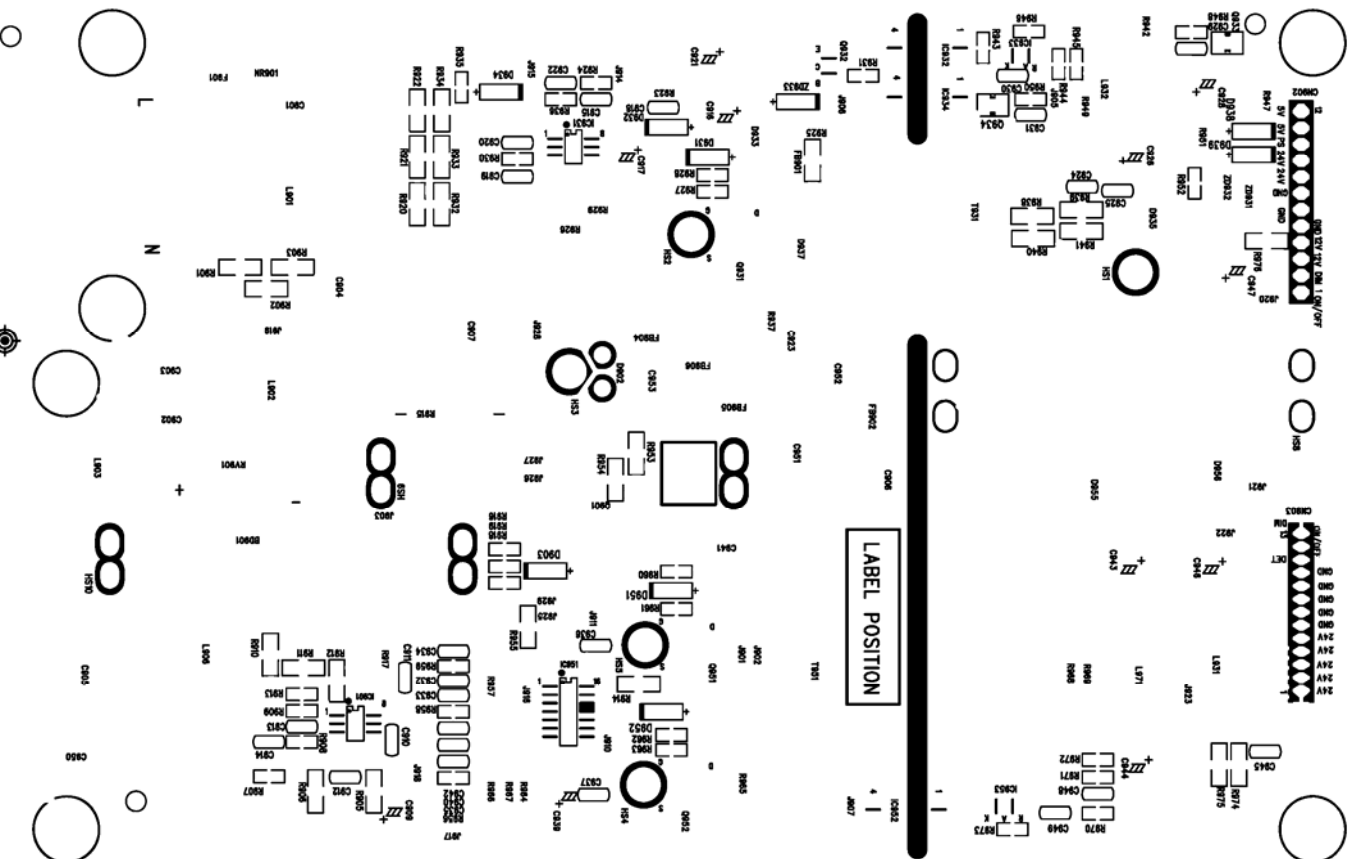


## 6. PCB Layout

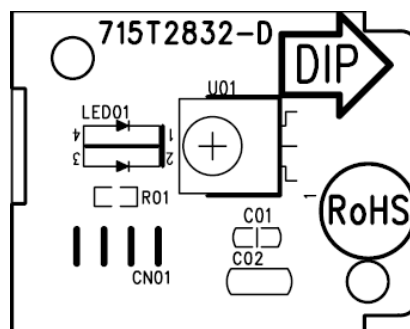
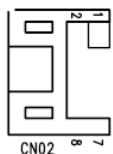
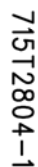
### 6.1 Main Board











## 7. White Balance, Luminance Adjustment

Approximately 30 minutes should be allowed for warm up before proceeding white balance adjustment.

Before started adjust white balance, please set the Ca210 Channel to 03 Channel and set it's mode to xyLv mode.

Color Temp.		Cold	Normal	Warm
HDMI MODE	x	272	285	313
	y	278	293	329
	Y	Panel max luminance		

**Note: The tolerance of the color coordinates should be less than  $\pm 5$ .**

How to setting the Ca210 channel, you can reference to Ca210 user guide or simple use the "Memory CH" up or down to set the channel to 03 channel, and use the "Mode" key to set the mode to xyLv.

Following is the procedure to do white-balance adjust

**Note: We can only the HDMI white balance to cover the white balance of all source mode, This method is meet to the Zoran 770 software.**

### HDMI mode:

I . In the TV mode adjust volume to zero and press number key 9  $\diamond$  8  $\diamond$  7  $\diamond$  6. It will achieve the factory mode.

Select the item of White Balance and press right key to enter it.

II .before to adjust the white balance, please press the factory mode OSD of "Reset" to reset all white balance factory setting.

In the White Balance you can adjust 8 items.

1-3 items is RO, GO, BO  $\diamond$  R, G, B Bias adjust.

4-6 items is RG, GG, BG  $\diamond$  R, G, B Gain adjust.

7 item is Def\_contrast\_all\_mode adjust

8 item is Def\_brightness\_all\_mode adjust

9 item is Colortemp\_all\_Mode adjust

10 item is color temperature select: Cool, Normal, and Warm.

### III. Gain adjustment:

#### A. Adjust Cool color-temperature:

1. Set the pattern generator to pattern 104 or 0 IRE pattern. And adjust the Item 8 to min luminance.
2. Switch the Ca210 to xyLv-mode (with press "MODE" button)
3. Switch the Ca210 channel to Channel 03 (with up or down "MEMORY CH" button)
4. The LCD-indicator on Ca210 will show x =272, y =278, Lv can adjust to max luminance.
5. Use the item 1 and item 3 to Adjust black balance :use 30 IRE(Pattern 115) signal,and adjust the black balance,until the Ca210 show x =272, y =278.
6. Use the item 4 and item 6 to adjust white balance: use 100 IRE (Pattern 105) signal, and adjust the white balance,

until the Ca210 show x =272, y =278.

7. Adjust item 7 to check color temperature is saturation or not: Add by 7 steps and then to adjust the item 4 and item 6 to check the color temperature is saturation or not, until is saturation.
8. Enter the item 10 to select another color temperature to adjust.

**B. Adjust Normal color-temperature:**

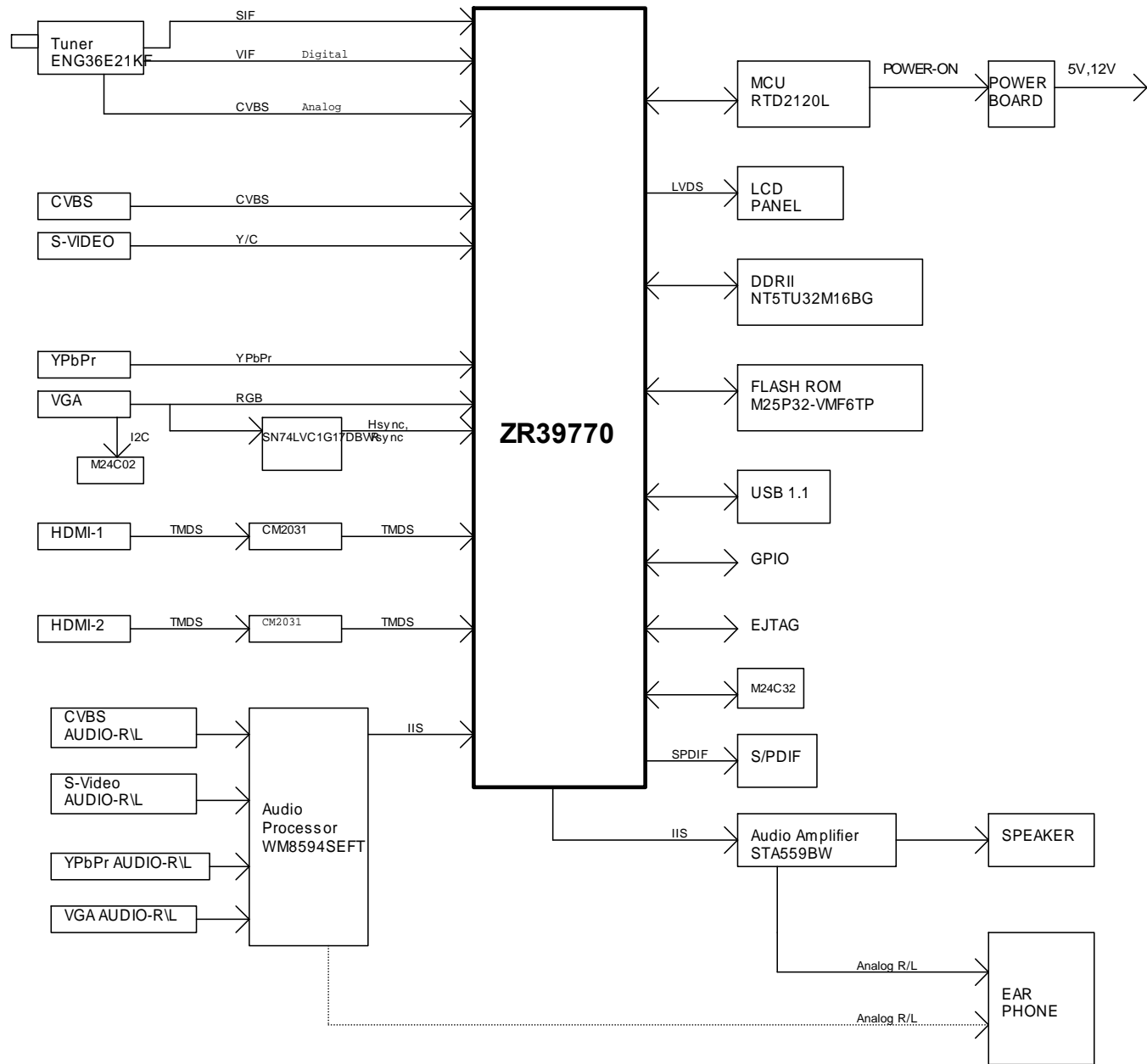
1. Set the pattern generator to pattern 104 or 0 IRE pattern. And adjust the Item 8 Cool color-temperature's item 8 value.
2. Switch the Ca210 to T $\Delta$ uvLv-mode (with press "MODE" button)
3. Switch the Ca210 channel to Channel 03 (with up or down "MEMORY CH" button)
4. The LCD-indicator on Ca210 will show T=9300.
5. Adjust the 9 item: Colortemp\_All\_Mode\_Normal, until Ca210 indicator reached the value T=9300
6. Adjust item 7 to check color temperature is saturation or not: Add by 7 steps and then to adjust the item 4 and item 6 to check the color temperature is saturation or not, until is saturation.
7. Loop the Item 5 and Item 6, until the T=9300 and RG/BG is saturation
8. Enter the 8 item to select another color temperature to adjust.

**C. Adjust Warm color-temperature:**

1. Set the pattern generator to pattern 104 or 0 IRE pattern. And adjust the Item 8 Cool color-temperature's item 8 value.
2. Switch the Ca210 to T $\Delta$ uvLv-mode (with press "MODE" button)
3. Switch the Ca210 channel to Channel 03 (with up or down "MEMORY CH" button)
4. The LCD-indicator on Ca210 will show T=6500.
5. Adjust the 9 item: Colortemp\_All\_Mode\_warm, until Ca210 indicator reached the value T=6500
6. Adjust item 7 to check color temperature is saturation or not: Add by 7 steps and then to adjust the item 4 and item 6 to check the color temperature is saturation or not, until is saturation.
7. Loop the Item 5 and Item 6, until the T=6500 and RG/BG is saturation
8. Enter the 8 item to select another color temperature to adjust.

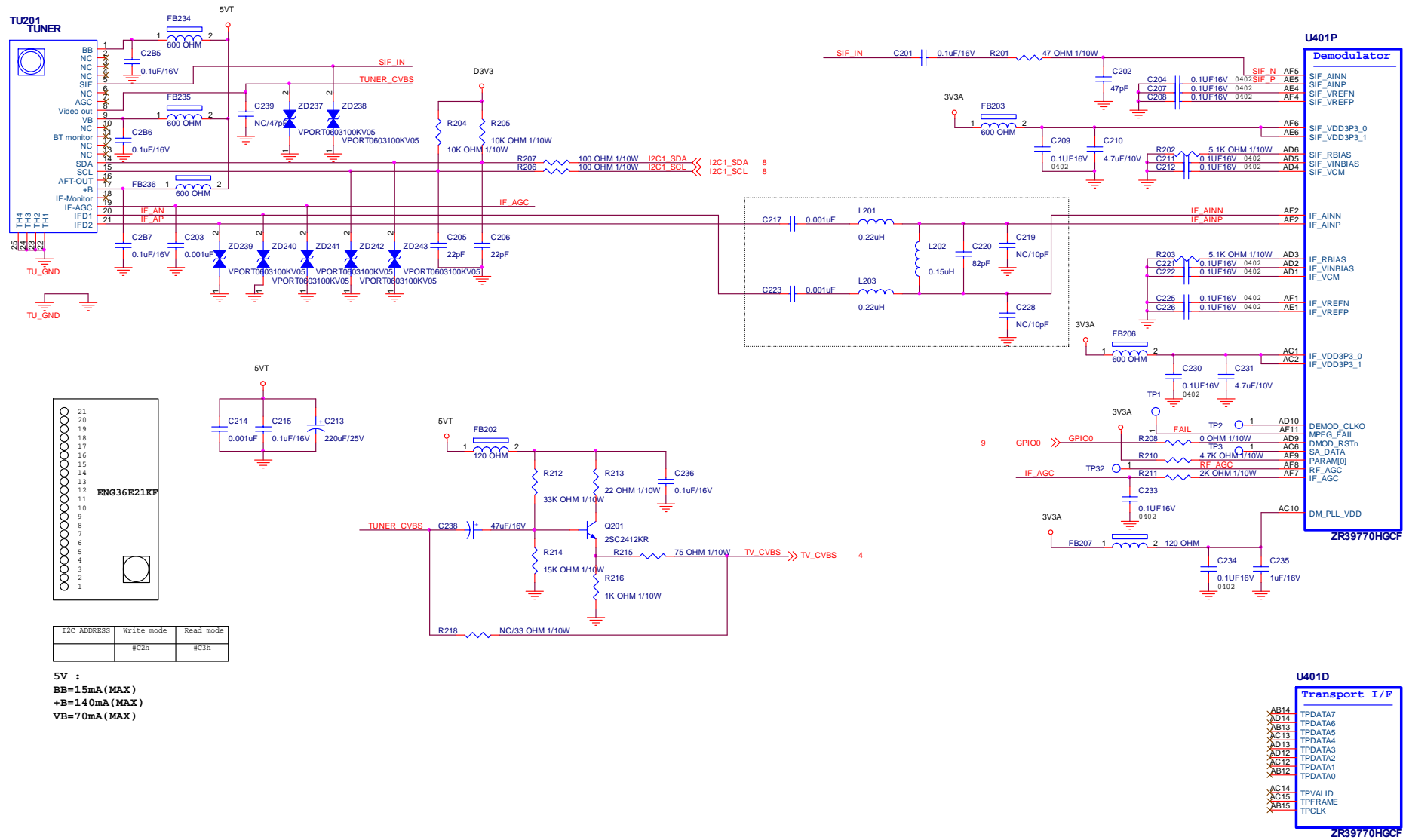
Press "Exit" button on remote control to quit from factory mode.

8. Block Diagram

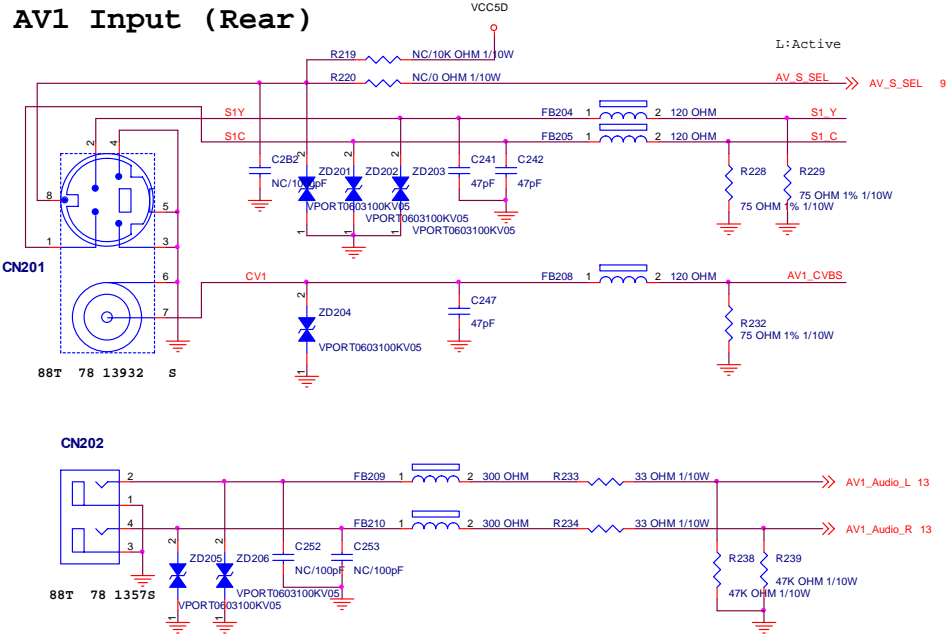


9. Schematic Diagram

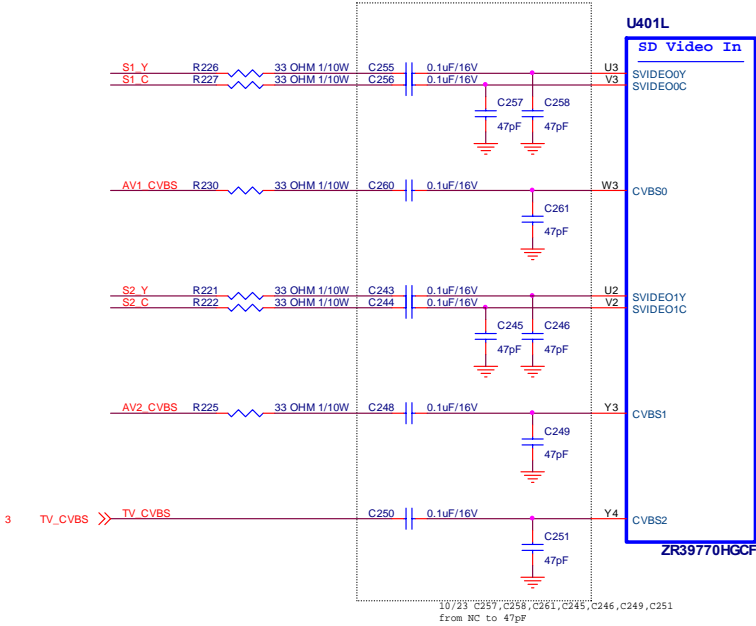
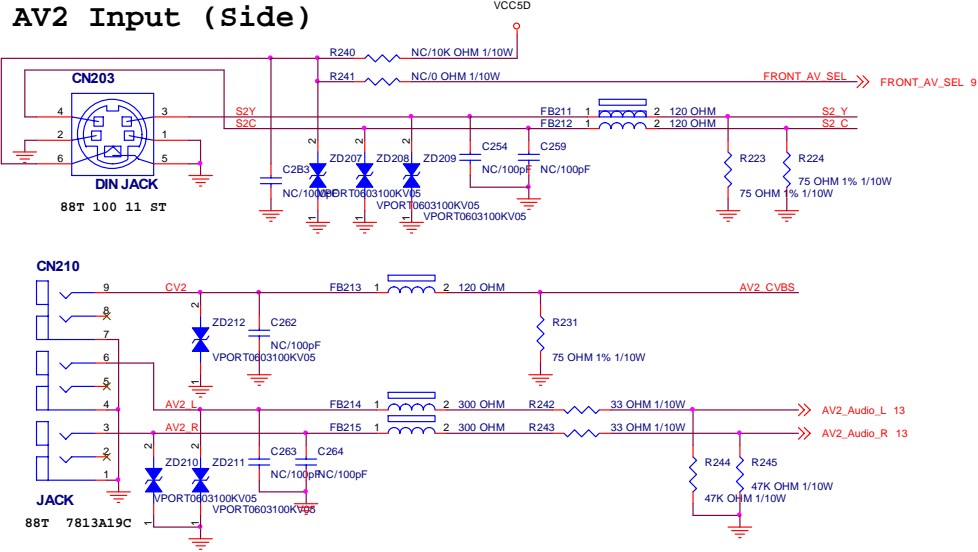
9.1 Main Board

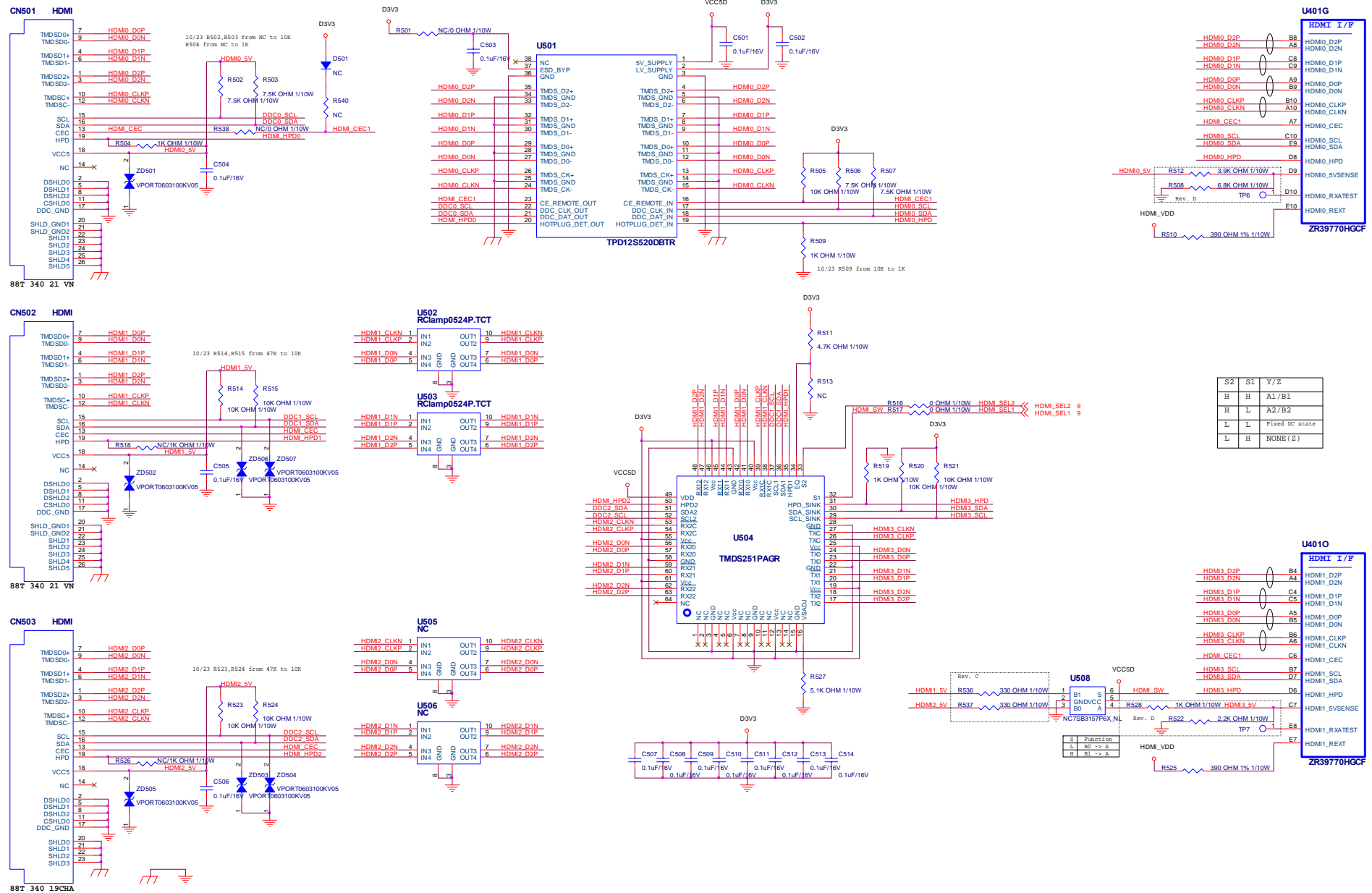


AV1 Input (Rear)



AV2 Input (Side)





side HDMI

TP V (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	Custom
振興産業株式会社	TPV MODEL	Rev	E
Key Component	PCB NAME	715T2830	
Date	Thursday, January 24, 2008	Sheet	5 of 18

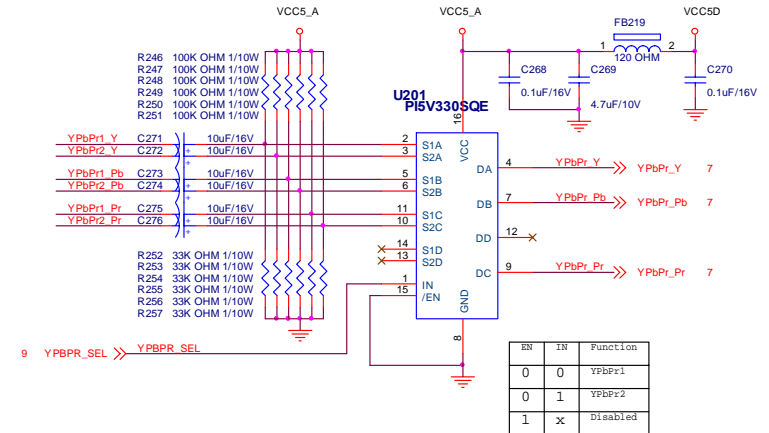
The schematic diagram illustrates the IFBPF1 Input section, which processes three input channels (CN204 JACK, CN205, CN206) and outputs YPbPr1 and YPbPr2 signals. The diagram is divided into three main input sections, each with its own set of components and a central processing block.

**Input Section 1 (CN204 JACK):** This section uses a 4-pin jack connector. The input signals are Y1, Pb1, and Pr1. The circuit includes diodes ZD213, ZD214, and ZD215, resistors R209, R2C5, and R2C6, and capacitors C265, C266, and C267. The output signals are YPbPr1\_Y, YPbPr1\_Pb, and YPbPr1\_Pr.

**Input Section 2 (CN205):** This section uses a 4-pin connector. The input signals are Y2, Pb2, and Pr2. The circuit includes diodes ZD216, ZD217, and ZD218, resistors R2C7, R2C8, and R2C9, and capacitors C277, C278, and C279. The output signals are YPbPr2\_Y, YPbPr2\_Pb, and YPbPr2\_Pr.

**Input Section 3 (CN206):** This section uses a 4-pin connector. The input signals are Y3, Pb3, and Pr3. The circuit includes diodes ZD219, ZD220, and ZD221, resistors R260, R261, R262, R263, R264, and R265, and capacitors C280, C281, C282, and C283. The output signals are YPbPr1\_Audio\_L, YPbPr1\_Audio\_R, YPbPr2\_Audio\_L, and YPbPr2\_Audio\_R.

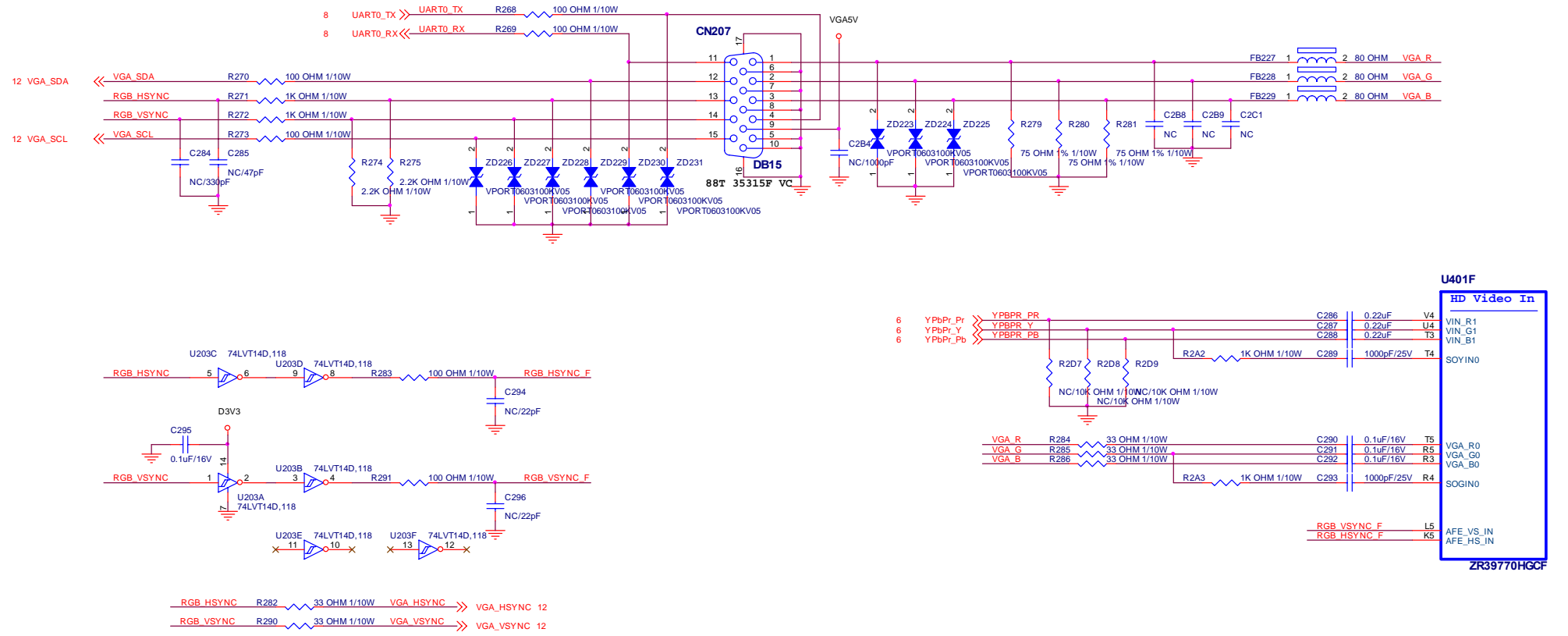
The central processing block, labeled "Rev. C", contains various components including resistors (R209, R2C5, R2C6, R2C7, R2C8, R2C9, R260, R261, R262, R263, R264, R265), capacitors (C265, C266, C267, C277, C278, C279, C280, C281, C282, C283), and transformers (FB216, FB217, FB218, FB220, FB221, FB222, FB223, FB224, FB225, FB226). The output signals are YPbPr1\_Y, YPbPr1\_Pb, YPbPr1\_Pr, YPbPr2\_Y, YPbPr2\_Pb, YPbPr2\_Pr, YPbPr1\_Audio\_L, YPbPr1\_Audio\_R, YPbPr2\_Audio\_L, and YPbPr2\_Audio\_R.



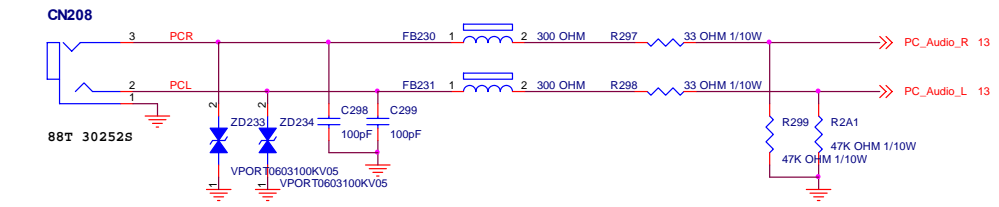
EN	IN	Function
0	0	YPbPr1
0	1	YPbPr2
1	x	Disabled

TPV ( Top Victory Electronics Co., Ltd. )		OEM MODEL	Size	Custom
結構瓜捌股		TPV MODEL	Rev	E
Key Component	06-YPbPr Inputs	PCB NAME	715T2830	
Date	Thursday, January 24, 2008	Sheet	6 of 18	裕峯 <裕峯>

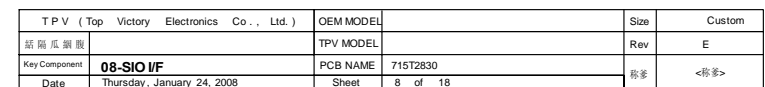


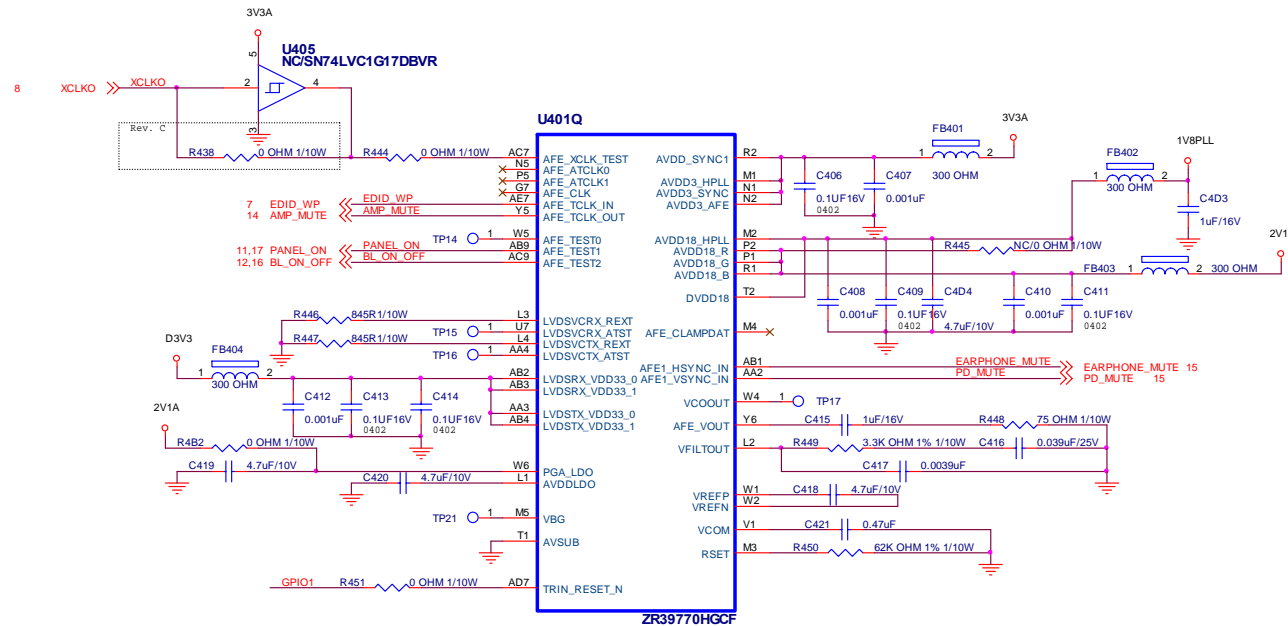
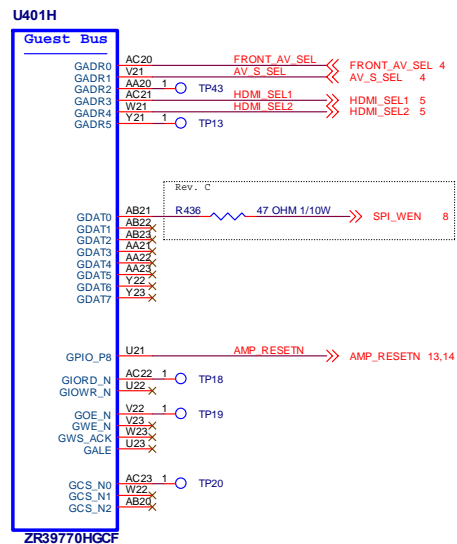
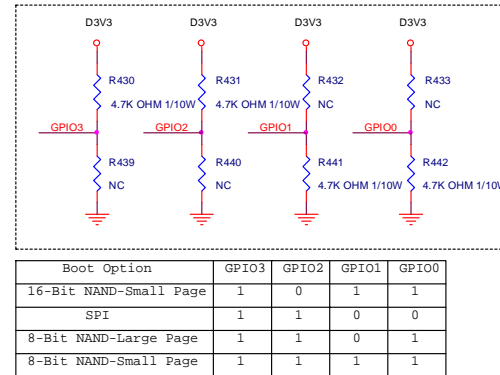


VGA Audio Input

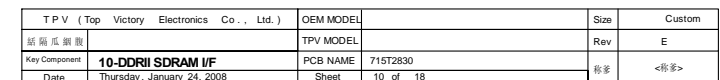


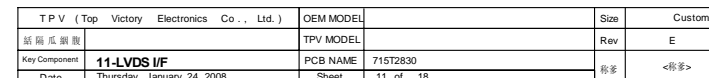
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話 隔 瓜 網 膜	TPV MODEL	Rev	E
Key Component	06-VGA Input	PCB NAME	715T2830
Date	Thursday, January 24, 2008	Sheet	7 of 18

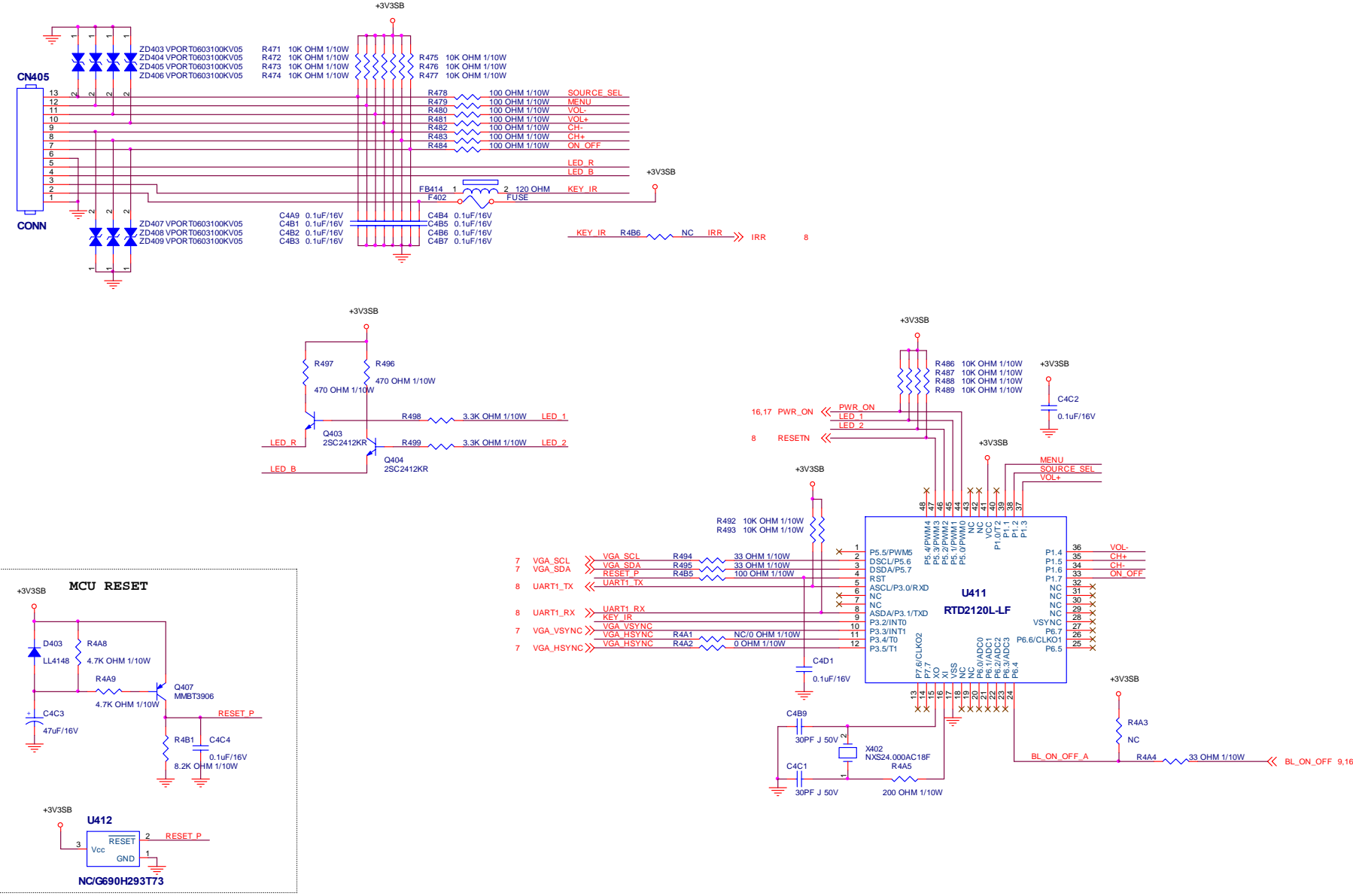




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話筒爪蓋殼		TPV MODEL	Rev	E
Key Component	09-GPIO Block	PCB NAME	715T2830	
Date	Thursday, January 24, 2008	Sheet	9 of 18	<簽名>

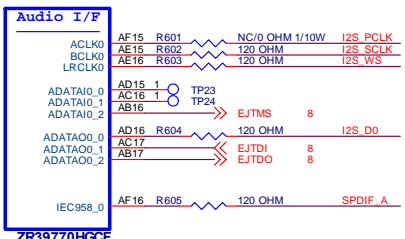






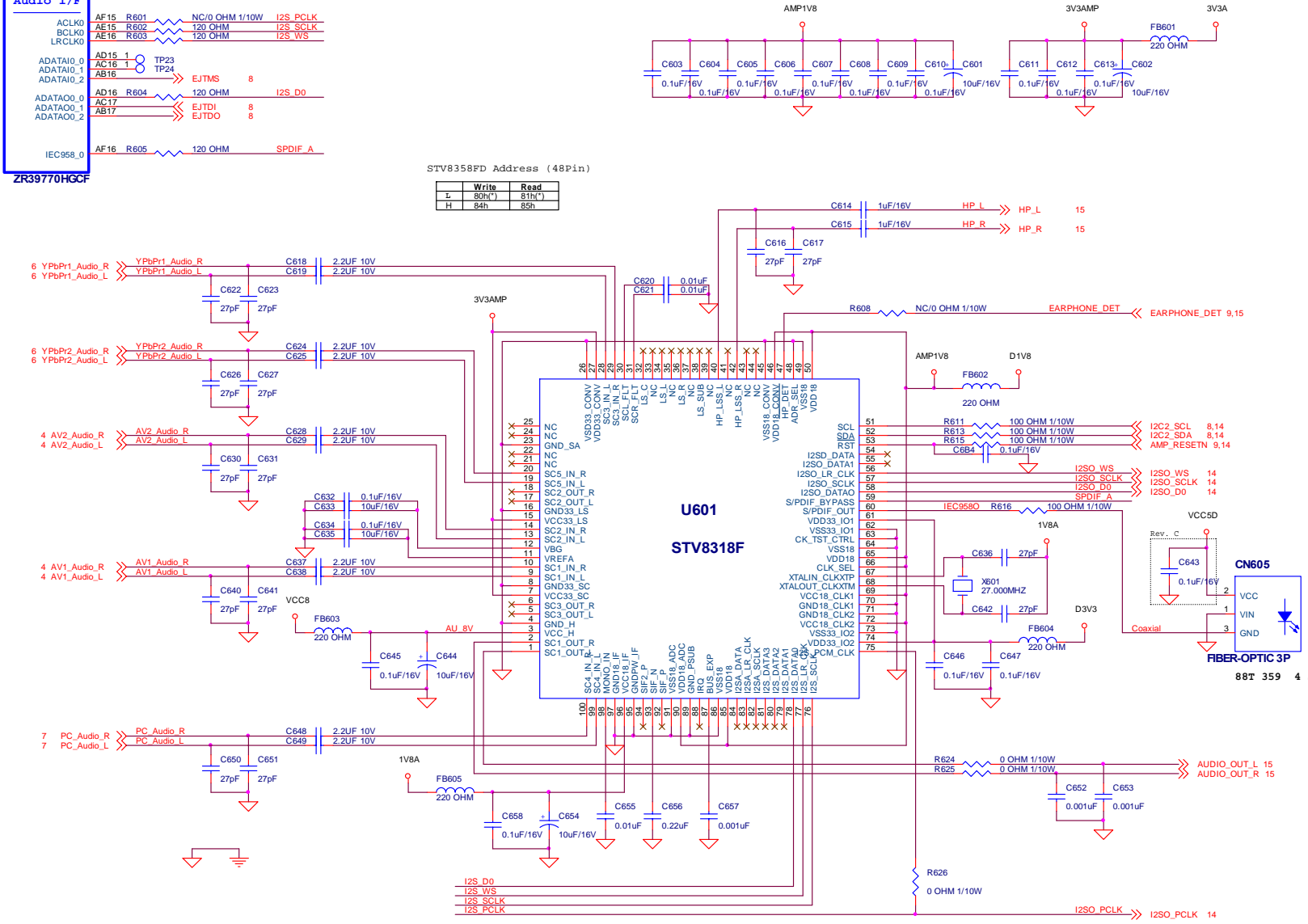
TPV (Top Victory Electronics Co., Ltd.)		OEM MODEL		Size	Custom
話 隔 瓜 網 廠		TPV MODEL		Rev	E
Key Component	12-Standby MCU	PCB NAME	715T2830	稱 號	<稱 號>
Date	Thursday, January 24, 2008	Sheet	12 of 18		

U401E



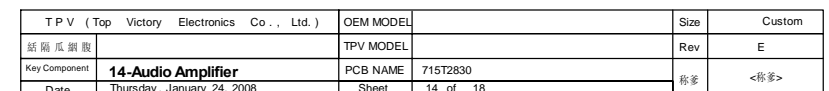
STV8358FD Address (48Pin)

	Write	Read
L	80h(*)	81h(*)
H	84h	85h

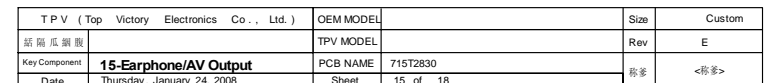


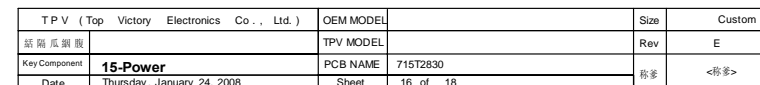
SPDIF Output

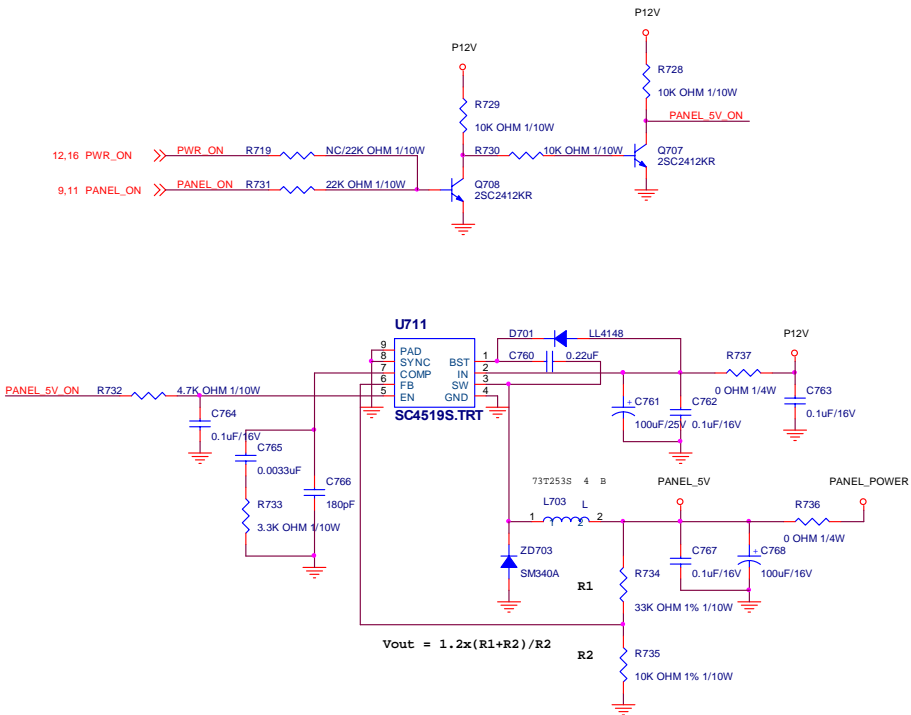
TPV (Top Victory Electronics Co., Ltd.)	OEM MODEL	Size	Custom
話 隔 瓜 頭 版	TPV MODEL	Rev	E
Key Component	13-Audio Processor	PCB NAME	715T2830
Date	Thursday, January 24, 2008	Sheet	13 of 18



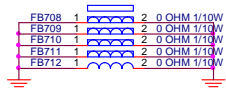




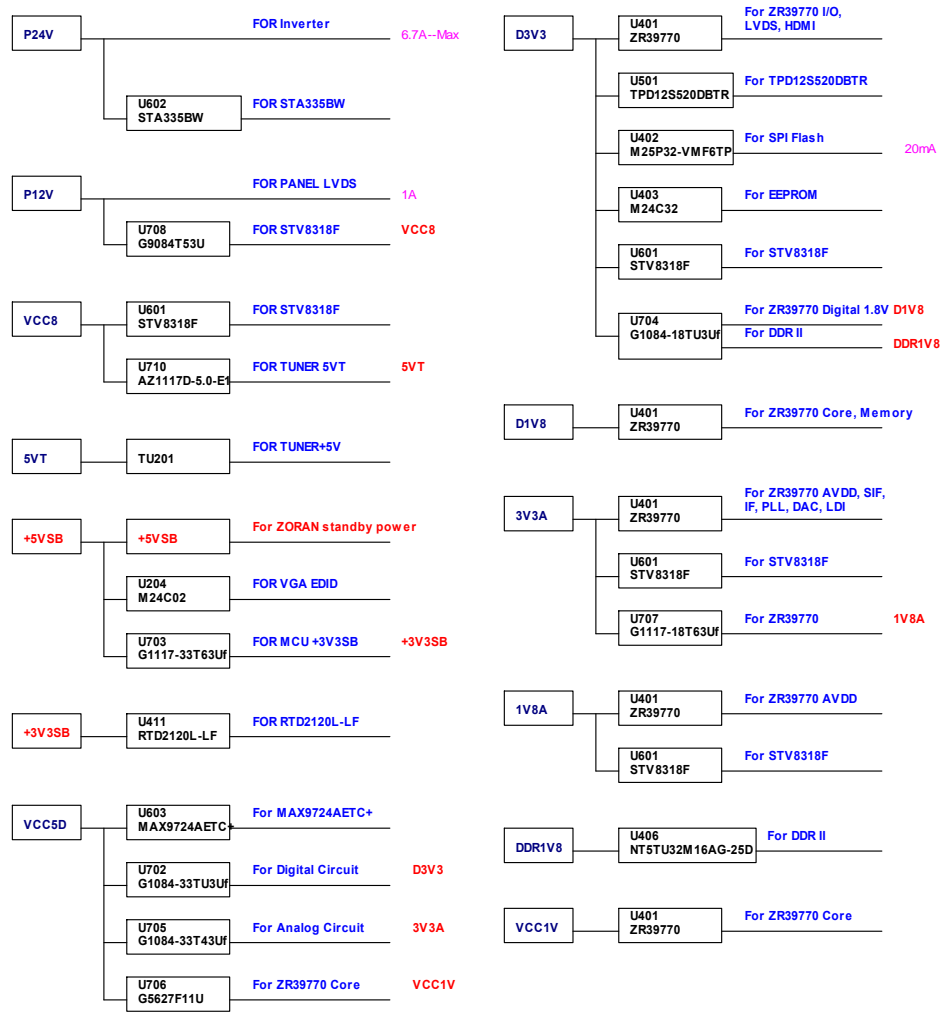




For 32' 5V PANEL Power



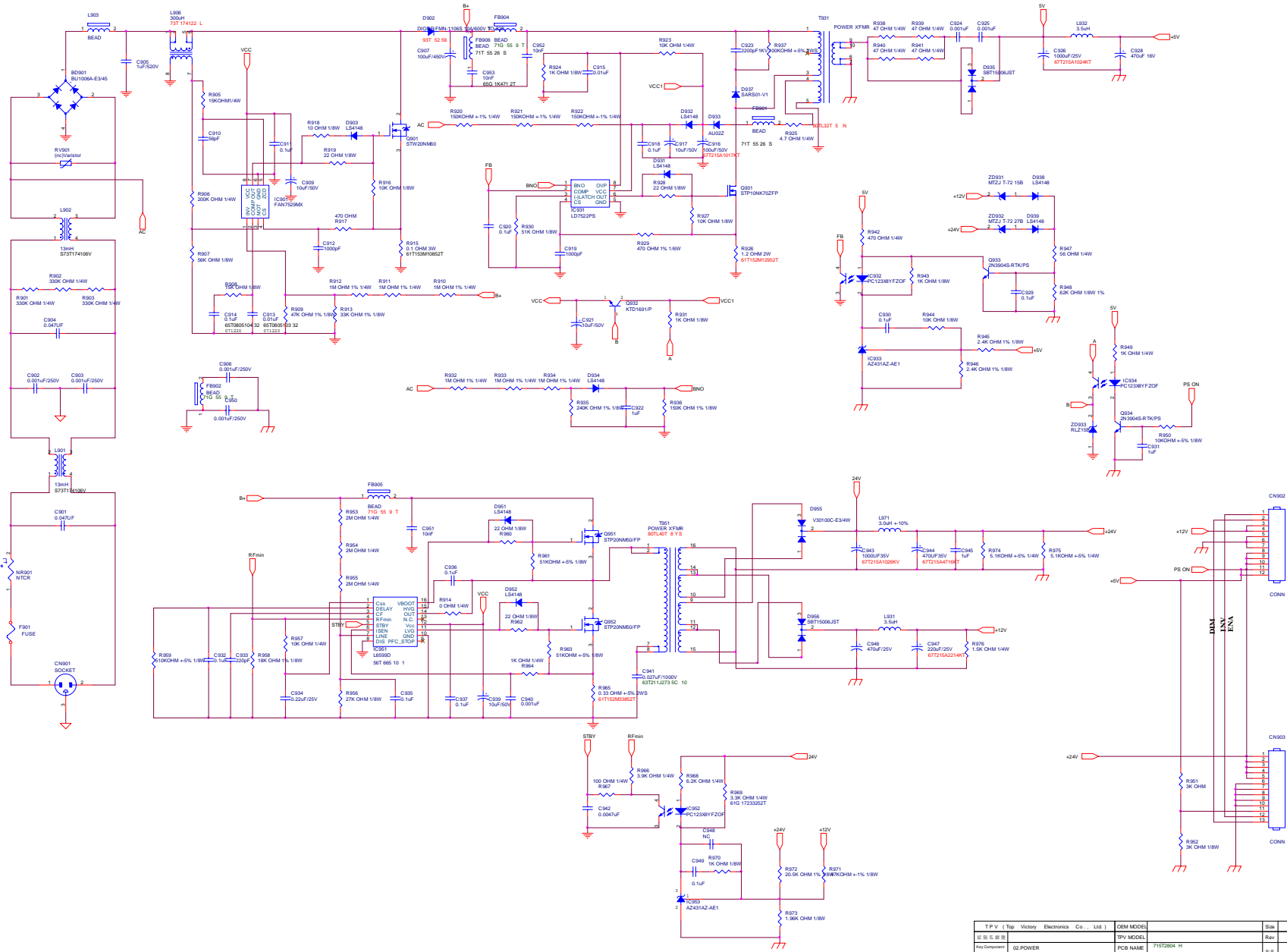
POWER INPUT TYPE  
+5VSB , P12V, P24V



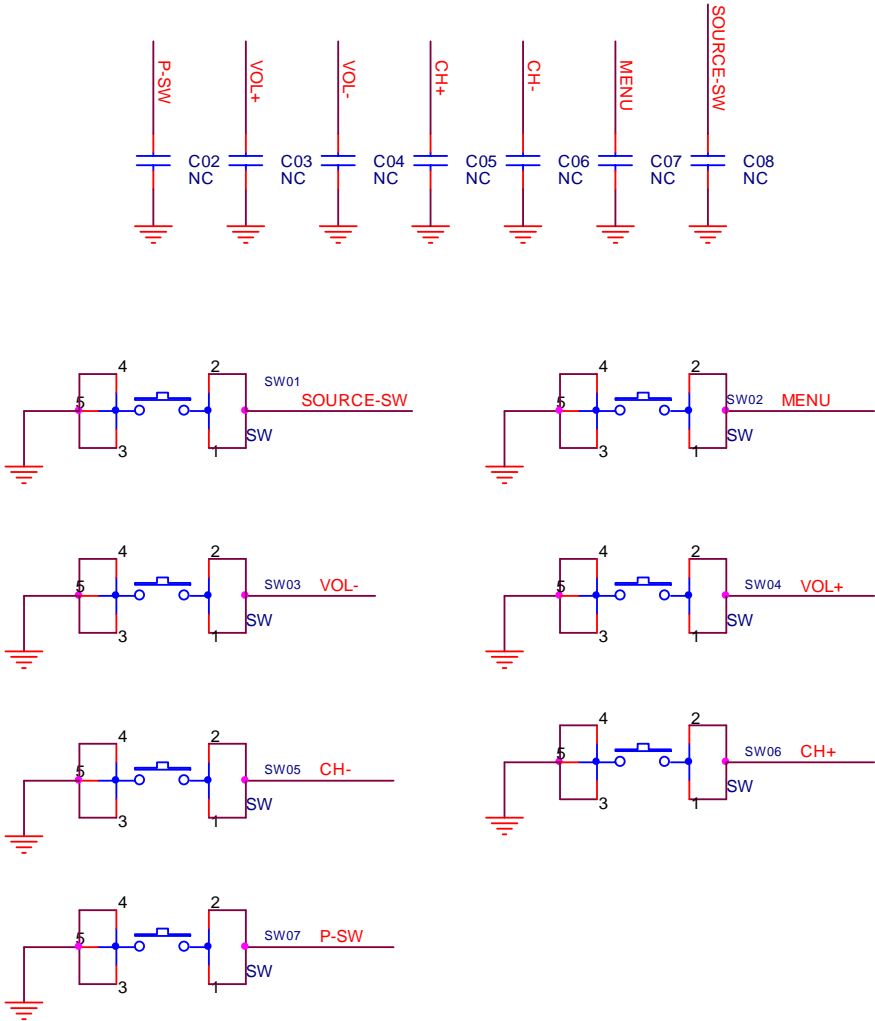
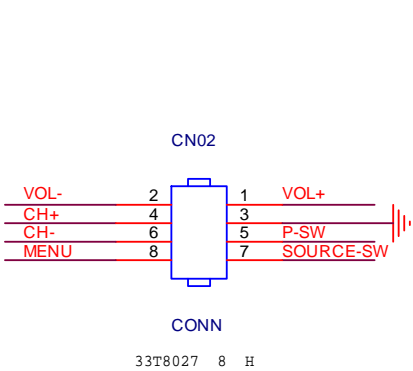
T P V ( Top Victory Electronics Co . , Ltd . )	OEM MODEL	Size	Custom
話 隔 瓜 獨 股	TPV MODEL	Rev	E
Key Component	17-Power & Power Loop	PCB NAME	715T2830
Date	Thursday, January 24, 2008	Sheet	17 of 18

32"LCD TV  
9.2 Power Board

Best Buy NS-LCD32-09

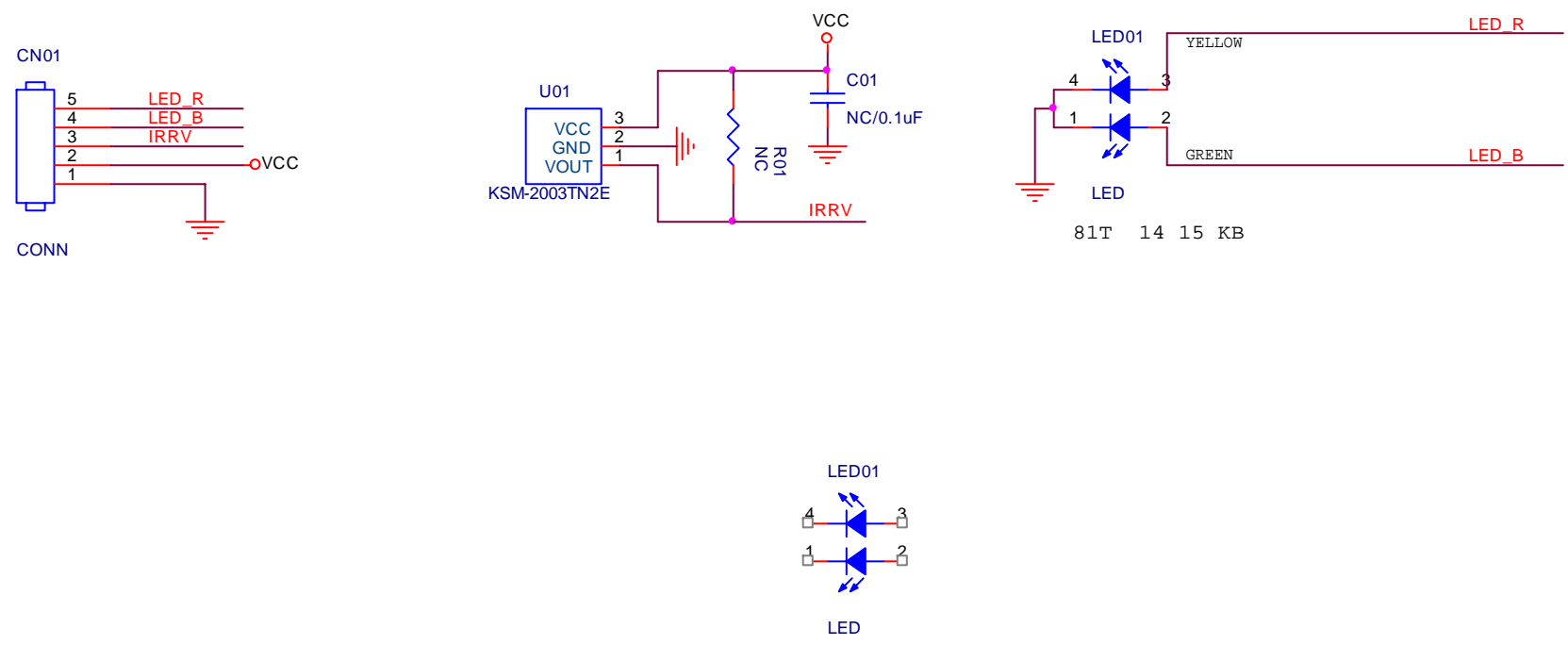


TPV (Tpv, Victory Electronics Co., Ltd.)	DEM MODEL	Sta	Custom
32" LCD TV	TPV MODEL	Rev	1.0
Rev 00000000	71752004 H	PCB NAME	
Date	Thursday, January 10, 2008	Sheet	1 of 2



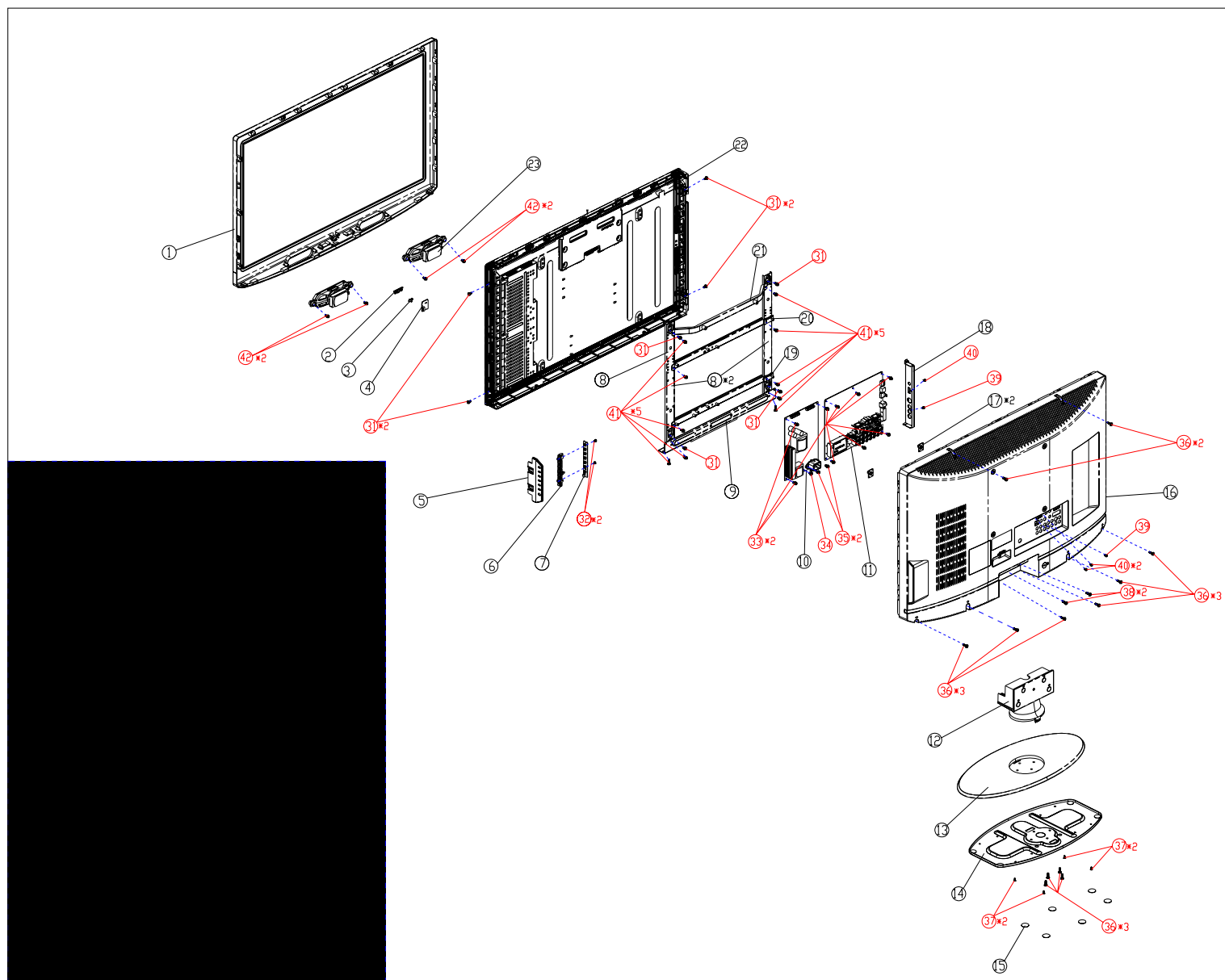
Title		
Size A	Document Number <b>715T2833</b>	Rev A
Date:	Thursday, August 02, 2007	Sheet 1 of 1

9.4 IR Board



Title			
Size A	Document Number 715T2832		Rev A
Date: Friday, September 28, 2007		Sheet 1 of 1	

## 10. Exploded View



## 11. BOM List

E328MZNKW1BYNN

Location	Part No.	Description
	040T 581 26704	SHIPPING LABEL
	040T 581654 3A	CARTON LABEL
	041T 68508 A	CONTROL CARD
	044T6000 4 6B	SPACE PAPER
	045T 77 3	PE PACKING
	049T 51 1A	ERADICATOR
	052T 1150 C	BLACK TAPE
	052T 1185	MIDDLE TAPE FOR CARTON
	052T 1186	SMALL TAPE
	052T 1209 A	ADHESIVE TAPE 50(W)*135
	052T 1211 B	ADHESIVE TYPE
	052T 2191 A	TAPE
	078T 495501 Y	SPK 8 OHM 11W 120*30MM SUNLINK
	089T 17356G554	AUDIO CABLE
	089T 725HAA DB	D-SUB
E08901	089T402A18N CX	POWER CORD
	092TB1JX1A31GM	PEONY A1KALINE LR03
E09505	095T801313D622	HARNESS 13P-5P(290MM)+8P(450MM)
E09502	095T8014 4X549	WIRE HARNESS 4P(PLUG)-B&R+B&W
E09503	095T801414X105	HARNESS 14P-13P 200MM
E09504	095T801830D165	HARNESS 30P-24P 120MM
	098TRABDANEBYA	REMOTE CONTROL INSIGNIA BLACK
	0D1T 930 8 47 CR3	SCREW
	0D1T 940 6120	SCREW
	0M1T 940 6120	SCREW
	0M1T 940 6120	SCREW
	0M1T 940 10 47 CR3	SCREW
	0M1T1730 6120	SCREW 3*6MM
	0M1T1730 10120	SCREW
	0M1T1740 6120	SCREW
	0Q1T 930 8 47 CR3	SCREW
	0Q1T 940 14 47 CR3	SCREW
	0Q1T1040 8 47 CR3	SCREW
	705TQ733041	PLASTIC ASS'Y
	705TQ834006	STAND ASS'Y
	705TQ834012	REAR COVER ASS'Y
	705TQ834013	BEZEL ASS'Y
	750TVMM5B1111N	PANEL V315B1-L01 C2 TW CMO
	A15T0278102	BKT-PCB-HOLDER-TOP
	A15T0279102	BKT-PCB-HOLDER-BTM
	A15T0280102	BKT-PANEL-SUPPORT
	A15T0281102	BKT-VESA-TOP
	A15T0283102	BKT-BASE-SUPPORT
	A15T0287301	BKT-IO-US
	ADPC24180BB1	ADAPTER BOARD
	CBPF8Z5KA1	MAIN BOARD
	IRPF8QA9	IR BOARD
	Q11T5027 1	LEAD-CLAMPER
	Q23T3178976 3A	INSIGNIA LOGO
	Q26T 800504 2	BARCODE
	Q36T 600 18113	CLOTH_GRIDDING
	Q36T 600 18114	CLOTH_GRIDDING
	Q36T 600 18120	CLOTH_GRIDDING
	Q36T 600 36 9 GP	NONWOVEN FABRIC



	Q36T 600 37 1 GP	NONWOVEN FABRIC
	Q36T 600 37 12 GP	NONWOVEN FABRIC
	Q40T 320976 3A	RATING LABEL
	Q40T0001624 4A	PALLET LABEL
	Q40T000262430A	IO LABEL
	Q40T0002976 4A	LABEL
	Q44T6000 1 1A	EMPTY CARTON FOR LOADING
	Q44T6002102 89	PAPER BOARD
	Q44T6002122 89	PAPER BOARD
	Q44TJ019 5 1A	U TYPE SHEET FOR BASE
	Q44TJ019101	CUSHION EPS 32
	Q44TJ019201	CUSHION EPS 32
	Q44TJ019301	CUSHION EPS 32
	Q44TJ019401	CUSHION EPS 32
	Q44TJ019976 1A	CARTON
	Q44TJ019BLO001	PAPER SHEET
	Q44TJ020101	EPE TOP FOR CMO PANEL
	Q44TJ020201	EPE BOTTOM FOR CMO PANEL
	Q44TSLIP00134A	PAPER SLIPSHEET
	Q44TSLIP00141A	PAPER SLIPSHEET
	Q45T 99609 61	EPE COVER FOR MONITOR
	Q45T 99609 79	EPE COVER FOR BASE
	Q45T2007M0102A	PE BAG
	Q50T 500523	CABLE TIE
	040T 58162435A	LABEL
	Q41T3201976 2A	MANUAL
	Q41T7800976 2A	QSG
	Q45T 76 28NV2 R	PE BAG FOR CLAMP
	0Q1T 930 6120	SCREW
	A33T0304 GMA1L0100	COVER_FUNC
	A33T0305 QV 1L0100	BUTTON_FUNC
	KEPF7QAA	KEY BOARD
	0Q1T 130 8120	SCREW
	0Q1T 940 14 47 CR3	SCREW
	A15T0384101	BKT-BASE-PLATE-A1-BIG
	A34T0521 GM 1L0120	BASE_S1
	Q12T6300 25 2	RUBBER FOOT
	Q37T0078011 GM	HINGE ASS'Y
	A15T0282101	BKT-VESA-BTM
	A34T0518 GM 1A0100	REAR COVER 32
	Q36T 600 18113	CLOTH_GRIDDING
	Q36T 600 37 36 GP	NONWOVEN FABRIC
	A33T0306 1 1C0100	POWER LENS
	A33T0307 ED 1C0100	LENS_IR
	A34T0517 GM AL0130	BEZEL TV32W-8A1
CN902	033T327812D	WAFER 12P PLUG
CN903	033T380213B Y	CONNECTOR
	040G 45762412B	CBPC LABEL
	051G 6 4503	GLUE_RTV
IC952	056T 139 3B	IC PC123Y82FZ0F
IC934	056T 139 3B	IC PC123Y82FZ0F
IC932	056T 139 3B	IC PC123Y82FZ0F
Q932	057T 761 7	KTD1691P
R915	061T153M10852T	RST MOFR 0.1 OHM +-5% 3WS
C904	063T107K474 US	X2 CAP 0.47UF K 275VAC
C901	063T107K474 US	X2 CAP 0.47UF K 275VAC
C905	063T210K105BCN	MPP CAP 1UF 520V P=15MM

C941	063T211J273 5C 10	0.027UF 5% 1000V P=15MM
C952	065T 1K103 2E6213	CAP CER 10NF K 1KV
C951	065T 1K103 2E6213	CAP CER 10NF K 1KV
C906	065T306M1022BM GP	Y1.CAP.001UF 250VAC MURATA
C903	065T306M1022BM GP	Y1.CAP.001UF 250VAC MURATA
C902	065T306M1022BM GP	Y1.CAP.001UF 250VAC MURATA
C950	065T306M1022BM GP	Y1.CAP.001UF 250VAC MURATA
C907	067T 40T10115K	EC 100UF V 450V 20*36MM
C926	067T215A1024KT	EC 1000UF 25V 10*25MM
C943	067T215A1026KV	EC 1000UF 35V 12.5*25MM
C928	067T215A4713KT	EC 470UF 16V 10*12.5MM
C944	067T215A4716KT	EC 470UF 35V 10*16MM
C946	067T215S4714KL	ELCAP 105°C 470UF M 25V
L903	071T 55 21	IND BEAD 10.0*6.0
FB901	071T 55 26 S	FERRITE CORE
FB906	071T 55 26 S	FERRITE CORE
L906	073T 174122 L	PFC CHOKE 230UH PT-009321
L931	073T 253 91 H	CHOKE COIL
L932	073T 253 91 H	CHOKE COIL
L971	073T 253150 L	CHOCK
T931	080TL32T 5 N	X'FMR 1.9MH YUVA-827
T951	080TL40T 8 YS	X'FMR 600UH YS04160149
CN901	087T 501 44 DL	AC SOCKET 3PIN + 2 SCREW HOLE V/T
	705TQ757011	Q951 ASS'Y
	705TQ757012	Q952 ASS'Y
	705TQ757013	Q931 ASS'Y
	705TQ757022	Q901 ASS'Y
	705TQ761021	NR901 ASS'Y
	705TQ793020	BD901 ASS'Y
	705TQ793021	D902 ASS'Y
	705TQ793022	D935 ASS'Y
	705TQ793023	D955/D956 ASS'Y
L901	S73T174106V	TRANSFORMER ASS'Y
L902	S73T174106V	TRANSFORMER ASS'Y
CN405	033T327813D	CONNECTOR
CN601	033T3802 4B Y	CONNECTOR
CN404	033T8027 24	CONN W TO B 12P*2 P*2.0 4504-2
	040T 457624 1B	CPU LABEL
	040T 45762412B	CBPC LABEL
R627	061T152M50852T	0.5OHM 5% 2W
C213	067T215B221 4P	CAP 105C 220UF M 25V 8*12
C720	067T215B221 4P	CAP 105C 220UF M 25V 8*12
C712	067T215B221 4P	CAP 105C 220UF M 25V 8*12
C726	067T215B221 4P	CAP 105C 220UF M 25V 8*12
C659	067T215S1026KV	EC CAP 1000UF 35V 12.5*25MM
C424	067T305V470 3	47UF +-20% 16V
C754	067T305V470 3	47UF +-20% 16V
C701	067T305V470 3	47UF +-20% 16V
C719	067T305V470 3	47UF +-20% 16V
C4C3	067T305V470 3	47UF +-20% 16V
C238	067T305V470 3	47UF +-20% 16V
C745	067T305V470 3	47UF +-20% 16V
C755	067T305V470 3	47UF +-20% 16V
C714	067T305V470 3	47UF +-20% 16V
C715	067T305V470 3	47UF +-20% 16V
L604	073T 259901 T	CHOKE 22UH 10% TSL0808RA-220K1R7
L603	073T 259901 T	CHOKE 22UH 10% TSL0808RA-220K1R7

L602	073T 259901 T	CHOKE 22UH 10% TSL0808RA-220K1R7
L601	073T 259901 T	CHOKE 22UH 10% TSL0808RA-220K1R7
CN202	088T 78 1357C	RCA JACK 1*1 W+R V/A
CN205	088T 78 1357C	RCA JACK 1*1 W+R V/A
CN206	088T 78 1357C	RCA JACK 1*1 W+R V/A
CN604	088T 78 1357C	RCA JACK 1*1 W+R V/A
CN204	088T 78 1359S	RCA JACK+ S 3+1 Y/W/R
CN201	088T 78 13932 C	RCA JACK + S JACK Y/B
CN210	088T 7813A19C	RCA JACK 1*3 R/W/Y
CN203	088T 100 11 ST	MINI DIN JACK 4P+ SWITCH 2MJ-0602-005
CN603	088T 30211K	PHONE JACK
CN208	088T 30252C	PHONE JACK 3.5MM 3P V/A GREEN
CN207	088T 35315F VC	D-SUB 15PIN VERTICAL CONNECTOR
CN605	088T 359 5 JT	FIBER-OPTIC 3P V/T JST1227
	090T 372 2	HEAT SINK
X601	093T 2227S JZ	CRYSTAL 49/S-27.000MHZ
X402	093T 2245B J	XTL NXS24.000AC18F-BK5 18PF 30PPM
X401	093T 2262B J	CRYSTAL NXS25.000 AC 20PF HC-49/US NSK
TU201	094TNTAT MA 4M	TUNER NTSC+ATSC ENG36E21KF PANASONIC
CN701	095T 82512X518	WIRE HARNESS 12P(SCN)-12P(PLUG)
	Q85T0075101	SHIELDING COVER
CN01	033T3802 5B YH	CONNECTOR 5PIN 2.0PITCH
U01	056T 627 33	IR 37.9KHZ KSM-603LM2E
CN02	033T8027 8 H	WAFER
SW05	077T 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW06	077T 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW07	077T 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW01	077T 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW02	077T 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW03	077T 600 1GCJ	TACT SWITCH TSPB-2 -NP
SW04	077T 600 1GCJ	TACT SWITCH TSPB-2 -NP
	715T2833 A	KEYBOARD PCB
Q951	057T 611 9	FET 2SK4097LS 9.5A/500V TO-220FI(LS)
	0M1T1730 8120	SCREW
	Q90G6084 3	HEAT SINK
Q952	057T 611 9	FET 2SK4097LS 9.5A/500V TO-220FI(LS)
	0M1T1730 8120	SCREW
	Q90G6084 3	HEAT SINK
Q931	057T 667 52	FET 2SK4100LS-T 7A/650V TO-220FI(LS)
	0M1T1730 8120	SCREW
	Q90G6084 3	HEAT SINK
Q901	057T 600 72	FET SPW16N50C3 16A/560V P-TO247
	0M1T1730 10120	SCREW
	Q12T 372 8	SILICON
	Q90T0095 2	HEAT SINK
NR901	061T 58030 WL	RST NTCR 3 OHM +-20% 5A THINKING
	Q09T 203 8	PIN
BD901	093T 50460 39	BRIDGE BU1006A-E3/45 10A/600V BU
	0M1T1730 10120	SCREW
	Q90T0095 2	HEAT SINK
D902	093T 52 56	DIODE FMN-1106S 10A/600V TO-220
	0M1T1730 8120	SCREW
	Q90G6084 3	HEAT SINK
D935	093T 60298	DIODE SBT15006JST 15A/60V TO-220ML(LS)
	0M1T1730 8120	SCREW

	Q90G6084 3	HEAT SINK
	005T 42 1	CUSHION
	032G3028 8	MICA
	051G 200 1	OIL FOR DISAPPEAR
D956	093T 60298	DIODE SBT15006JST 15A/60V TO-220ML(LS)
D955	093T 60310	DIODE V30100C-E3/4W 30A/100V TO-220AB
	0M1T1730 10120	SCREW
	Q90T0087 2	HEAT SINK
IC901	056T 368 12	IC FAN7529MX SOP-8
IC931	056T 379 79	IC LD7522PS SOP-8
IC951	056T 665 10 1	IC RESONANT L6599D SO-16N ST
Q933	057T 417 12 T	TRA 2N3904S-RTK/PS SOT-23 KEC
Q934	057T 417 12 T	TRA 2N3904S-RTK/PS SOT-23 KEC
R973	061G0805196 1F	RST CHIP 1.96K 1/8W 1%
R918	061T0805100	RST CHIPR 10 OHM +-5% 1/8W
R924	061T0805102	RST CHIPR 1KOHM +-5% 1/4W
R931	061T0805102	RST CHIPR 1KOHM +-5% 1/4W
R943	061T0805102	RST CHIPR 1KOHM +-5% 1/4W
R970	061T0805102	RST CHIPR 1KOHM +-5% 1/4W
R916	061T0805103	RST CHIPR 10 KOHM +-5% 1/8W
R927	061T0805103	RST CHIPR 10 KOHM +-5% 1/8W
R944	061T0805103	RST CHIPR 10 KOHM +-5% 1/8W
R950	061T0805103	RST CHIPR 10 KOHM +-5% 1/8W
R936	061T0805150 3F	RST CHIPR 150 KOHM +-1% 1/8W
R908	061T0805153	RST CHIPR 15 KOHM +-5% 1/8W
R958	061T0805180 2F	RST CHIPR 18 KOHM +-1% 1/8W
R972	061T0805205 2F	RST CHIPR 20.5KOHM +-1% 1/8W
R962	061T0805220	RST CHIPR 22 OHM +-5% 1/8W
R960	061T0805220	RST CHIPR 22 OHM +-5% 1/8W
R928	061T0805220	RST CHIPR 22 OHM +-5% 1/8W
R919	061T0805220	RST CHIPR 22 OHM +-5% 1/8W
R945	061T0805240 1F	RST CHIPR 2.4 KOHM +-1% 1/8W
R946	061T0805240 1F	RST CHIPR 2.4 KOHM +-1% 1/8W
R935	061T0805240 3F	RST CHIPR 240 KOHM +-1% 1/8W
R956	061T0805273	RST CHIPR 27 KOHM +-5% 1/8W
R952	061T0805302	RST CHIPR 3 KOHM +-5% 1/8W
R913	061T0805330 2F	RST CHIPR 33 KOHM +-1% 1/8W
R971	061T0805470 2F	RST CHIPR 47 KOHM +-1% 1/8W
R909	061T0805470 2F	RST CHIPR 47 KOHM +-1% 1/8W
R930	061T0805513	RST CHIPR 51 KOHM +-5% 1/8W
R961	061T0805513	RST CHIPR 51 KOHM +-5% 1/8W
R963	061T0805513	RST CHIPR 51 KOHM +-5% 1/8W
R959	061T0805514	RST CHIPR 510KOHM +-5% 1/8W
R907	061T0805563	RST CHIPR 56 KOHM +-5% 1/8W
R948	061T0805620 2F	RST CHIPR 62 KOHM +-1% 1/8W
R914	061T1206000	RST CHIPR 0 OHM +-5% 1/4W
R911	061T1206100 4F	RST CHIPR 1 MOHM +-1% 1/4W
R912	061T1206100 4F	RST CHIPR 1 MOHM +-1% 1/4W
R932	061T1206100 4F	RST CHIPR 1 MOHM +-1% 1/4W
R933	061T1206100 4F	RST CHIPR 1 MOHM +-1% 1/4W
R934	061T1206100 4F	RST CHIPR 1 MOHM +-1% 1/4W
R910	061T1206100 4F	RST CHIPR 1 MOHM +-1% 1/4W
R922	061T1206150 3F	RST CHIPR 150KOHM +-1% 1/4W
R921	061T1206150 3F	RST CHIPR 150KOHM +-1% 1/4W
R920	061T1206150 3F	RST CHIPR 150KOHM +-1% 1/4W
R976	061T1206152	RST CHIPR 1.5 KOHM +-5% 1/4W
R905	061T1206153	RST CHIPR 15 KOHM +-5% 1/4W

R906	061T1206204	RST CHIPR 200 KOHM +-5% 1/4W
R955	061T1206205	RST CHIPR 2 MOHM +-5% 1/4W
R954	061T1206205	RST CHIPR 2 MOHM +-5% 1/4W
R953	061T1206205	RST CHIPR 2 MOHM +-5% 1/4W
R903	061T1206334	RST CHIPR 330 KOHM +-5% 1/4W
R902	061T1206334	RST CHIPR 330 KOHM +-5% 1/4W
R901	061T1206334	RST CHIPR 330 KOHM +-5% 1/4W
R941	061T1206470	RST CHIPR 47 OHM +-5% 1/4W
R940	061T1206470	RST CHIPR 47 OHM +-5% 1/4W
R939	061T1206470	RST CHIPR 47 OHM +-5% 1/4W
R938	061T1206470	RST CHIPR 47 OHM +-5% 1/4W
R925	061T1206479	RST CHIPR 4.7 OHM +-5% 1/4W
R974	061T1206512	RST CHIPR 5.1KOHM +-5% 1/4W
R975	061T1206512	RST CHIPR 5.1KOHM +-5% 1/4W
C919	065T0805102 31	1000PF 50V NPO
C912	065T0805102 31	1000PF 50V NPO
C924	065T0805102 32	CHIP 1000PF 50V X7R 0805
C925	065T0805102 32	CHIP 1000PF 50V X7R 0805
C940	065T0805102 32	CHIP 1000PF 50V X7R 0805
C913	065T0805103 32	10NF/50V/0805/X7R
C915	065T0805103 32	10NF/50V/0805/X7R
C914	065T0805104 32	CHIP 0.1UF 50V X7R
C949	065T0805104 32	CHIP 0.1UF 50V X7R
C920	065T0805104 32	CHIP 0.1UF 50V X7R
C937	065T0805104 32	CHIP 0.1UF 50V X7R
C936	065T0805104 32	CHIP 0.1UF 50V X7R
C935	065T0805104 32	CHIP 0.1UF 50V X7R
C932	065T0805104 32	CHIP 0.1UF 50V X7R
C930	065T0805104 32	CHIP 0.1UF 50V X7R
C929	065T0805104 32	CHIP 0.1UF 50V X7R
C918	065T0805104 32	CHIP 0.1UF 50V X7R
C911	065T0805104 32	CHIP 0.1UF 50V X7R
C922	065T0805105 37	CHIP 1UF 50V Y5V
C931	065T0805105 37	CHIP 1UF 50V Y5V
C945	065T0805105 37	CHIP 1UF 50V Y5V
C933	065T0805221 31	220PF 50V NPO
C934	065T0805224 22	CAIP CAP 0.22 UF 25V X7R
C942	065T0805472 32	MLCC 0805 CAP 4700PF K 50V X7R
C910	065T0805560 31	MLCC 0805 CAP 56PF J 50V NPO
ZD933	093T 39S 15 T	RLZ15B
D952	093T 64S901 T	DIODE LS4148
D951	093T 64S901 T	DIODE LS4148
D939	093T 64S901 T	DIODE LS4148
D938	093T 64S901 T	DIODE LS4148
D934	093T 64S901 T	DIODE LS4148
D932	093T 64S901 T	DIODE LS4148
D931	093T 64S901 T	DIODE LS4148
D903	093T 64S901 T	DIODE LS4148
C666	064T701J4740AT	0.47UF 50V
C684	064T701J4740AT	0.47UF 50V
C644	067T 305100 3T	10UF 16V
C639	067T 305100 3T	10UF 16V
C602	067T 305100 3T	10UF 16V
C601	067T 305100 3T	10UF 16V
C276	067T 305100 3T	10UF 16V
C275	067T 305100 3T	10UF 16V
C274	067T 305100 3T	10UF 16V

C273	067T 305100 3T	10UF 16V
C272	067T 305100 3T	10UF 16V
C271	067T 305100 3T	10UF 16V
C654	067T 305100 3T	10UF 16V
C6A7	067T 305101 3T	100UF 16V 105C
C768	067T 305101 3T	100UF 16V 105C
C718	067T 305101 4T	CAP 105°C 100UF M 25V
C735	067T 305101 4T	CAP 105°C 100UF M 25V
C761	067T 305101 4T	CAP 105°C 100UF M 25V
C6A8	067T 305101 6T	E.C 100UF M 35V 8*12
C740	067T 305220 3T	EC 105°C 22UF M 16V
C729	067T 305220 3T	EC 105°C 22UF M 16V
C6A2	067T 305220 3T	EC 105°C 22UF M 16V
C6A1	067T 305220 3T	EC 105°C 22UF M 16V
C448	067T 305220 4T	105 RADIAL E-CAPACTOR 22UF 25V
C757	067T 305221 2T	CAP 105°C 220UF M 10V
C741	067T 305221 2T	CAP 105°C 220UF M 10V
C748	067T 305221 2T	CAP 105°C 220UF M 10V
C730	067T 305221 2T	CAP 105°C 220UF M 10V
C725	067T 305470 6T	E.C 47UF M 35V
C775	067T 305221 3T	220UF/16V
R01	061T0603153	RST CHIPR 15 KOHM +-5% 1/10W
C01	065T0603104 32	CHIP 0.1UF 50V X7R
LED01	081T 14 24 EL	CHIP LED BLUE/DARK RED
	715T2832 D	IR PCB FR-4 D/S T1.6MM 24X30MM
CN901	006G 31500	EYELET
L906	006G 31502	1.5MM RIVET
T951	006G 31502	1.5MM RIVET
IC953	056T 158 10 T	IC AZ431AZ-AE1 TO-92 AAC
IC933	056T 158 10 T	IC AZ431AZ-AE1 TO-92 AAC
R969	061G 17233252T	3.3K 1/4W
R929	061G 21047152T	470 OHM 1% 1/6W
R937	061G208M10452T	RST MOF 100K 5% 1W
R964	061T 17210252T	RST CFR 1KOHM +-5% 1/4W
R949	061T 17210252T	RST CFR 1KOHM +-5% 1/4W
R957	061T 17210352T	CFR 10KOHM +-5% 1/4W
R923	061T 17210352T	CFR 10KOHM +-5% 1/4W
R942	061T 17247152T	470OHM 5% 1/4W
R947	061T 17256052T	RST CFR 56 OHM +-5% 1/4W
R968	061T 17262252T	6.2KPHM 5% 1/4W
R967	061T 20010152T	100 OHM 1% 1/4W
R966	061T 20039252T	RST MFR 3.9KOHM +-1% 1/4W
R951	061T 21030252T	3KOHM 1% 1/6W
R917	061T 60247152T	470OHM +-5% 1/6W
R926	061T152M12952T	RST MOFR 1.2OHM +-5% 2WS
R965	061T152M33852T	RST MOFR 0.33 OHM +-5% 2WS
C953	065G 1K471 2T	470PF 1KV Z5P +-10%
C923	065T 1K222 2T6921	0.0022UF 1KV +-10%
C916	067T215A1017KT	EC 100UF 50V 8*12MM
C947	067T215A2214KT	EC 220UF 25V 8*12MM
C939	067T215Y1007KT	EC105 10U 50V KEM50V
C921	067T215Y1007KT	EC105 10U 50V KEM50V
C917	067T215Y1007KT	EC105 10U 50V KEM50V
C909	067T215Y1007KT	EC105 10U 50V KEM50V
FB904	071G 55 9 T	FERRITE BEAD
FB905	071G 55 9 T	FERRITE BEAD

FB902	071G 55 9 T	FERRITE BEAD
F901	084T 55 4	FUSE 382-5A 250V WICKMANN
ZD931	093T 3916652T	MTZJ T-72 15B
ZD932	093T 3917052T	MTZJT-72 27B
D933	093T 5250S52T	AU02Z
D937	093T1080 252T	DIODE SARSO1-V1 SANKEN
	715T2804 1	POWER PCB CEM-1 130X200X1.6MM SS
FL701	053T 43 1	FILTER BULLWILL
FL702	053T 43 1	FILTER BULLWILL
FL703	053T 43 1	FILTER BULLWILL
U604	056T 158501	IC AZ431AN-AE1 SOT23-3 AAC
U706	056T 379 92	IC G5627F11U SOP-8(FD)
U705	056T 563 75	G1084-33T43UF TO-252
U711	056T 563109	IC SC4519S.TRT SO-8 EDP
U707	056T 563113	IC G1117-18T63UF 1A/1.8V SOT-223
U703	056T 563114	IC G1117-33T63UF 1A/3.3V SOT-223
U702	056T 563121	IC G1084-33TU3UF TO-263T
U704	056T 563123	IC G1084-18TU3UF TO-263T
U708	056T 563124	ICG9084TU3U TO-263T
U709	056T 563126	IC G1117T63UF SOT-223
U710	056T 585 11	AZ1117D-5.0-E1
U601	056T 593 29 1	IC STV8318F TQFP-100
U602	056T 593 32	IC STA335BW13TR POWERSSO36
U406	056T 615 67	IC NT5TU32M16BG-25D 512MB BGA-84
U603	056T 616 43	IC MAX9724AETC+ TQFN-EP-12
U201	056T 634 2 1	PI5V330SSQE PERICOMQSOP-16
U504	056T 634902	IC TMDS251PAGR TQFP-64
U502	056T 662 10	IC RCLAMP0524P.TCT
U503	056T 662 10	IC RCLAMP0524P.TCT
U505	056T 662 10	IC RCLAMP0524P.TCT
U506	056T 662 10	IC RCLAMP0524P.TCT
U501	056T 662 14	IC TPD12S520DBTR TSSOP-38
U508	056T 7SB157 F	IC NC7SB3157P6X_NL
U411	056T1125701 X	IC MCU RTD2120L-LF LQFP48
U401	056T1126 32	IC ZR39770BGCF BGA-632
U204	056T1133 84	AF24BC02-S1
U402	056T1133103BZC	IC M25P32-VMF6P 32M SO-16
U403	056T113353A	M24C32-WMN6TP
U203	056T4LVT 14 P	IC 74LVT14D,118 BY SO-14 PHILIPS
Q603	057T 417511	TRA MMBT3904 BLUE ROKET
Q608	057T 417511	TRA MMBT3904 BLUE ROKET
Q611	057T 417511	TRA MMBT3904 BLUE ROKET
Q407	057T 417512	TRA MMBT3906 BLUE ROKET
Q604	057T 417512	TRA MMBT3906 BLUE ROKET
Q607	057T 417512	TRA MMBT3906 BLUE ROKET
Q605	057T 759 2	RK7002
Q606	057T 759 2	RK7002
Q609	057T 759 2	RK7002
Q610	057T 759 2	RK7002
Q705	057T 763 3	AO4411L SO-8 BY AOS SMT
Q708	057T 765 1	2SC2412KR
Q707	057T 765 1	2SC2412KR
Q704	057T 765 1	2SC2412KR
Q702	057T 765 1	2SC2412KR
Q701	057T 765 1	2SC2412KR
Q404	057T 765 1	2SC2412KR
Q403	057T 765 1	2SC2412KR

Q201	057T 765 1	2SC2412KR
R602	061T0603000	CHIP 00HM 1/16W
R603	061T0603000	CHIP 00HM 1/16W
R604	061T0603000	CHIP 00HM 1/16W
R605	061T0603000	CHIP 00HM 1/16W
R624	061T0603000	CHIP 00HM 1/16W
R625	061T0603000	CHIP 00HM 1/16W
R626	061T0603000	CHIP 00HM 1/16W
R642	061T0603000	CHIP 00HM 1/16W
R643	061T0603000	CHIP 00HM 1/16W
R644	061T0603000	CHIP 00HM 1/16W
R517	061T0603000	CHIP 00HM 1/16W
R516	061T0603000	CHIP 00HM 1/16W
R4B2	061T0603000	CHIP 00HM 1/16W
R4A2	061T0603000	CHIP 00HM 1/16W
R451	061T0603000	CHIP 00HM 1/16W
R444	061T0603000	CHIP 00HM 1/16W
R438	061T0603000	CHIP 00HM 1/16W
R437	061T0603000	CHIP 00HM 1/16W
R408	061T0603000	CHIP 00HM 1/16W
R296	061T0603000	CHIP 00HM 1/16W
R208	061T0603000	CHIP 00HM 1/16W
R645	061T0603000	CHIP 00HM 1/16W
R647	061T0603000	CHIP 00HM 1/16W
R661	061T0603000	CHIP 00HM 1/16W
R664	061T0603000	CHIP 00HM 1/16W
R670	061T0603000	CHIP 00HM 1/16W
R709	061T0603100	CHIP 100HM 1/16W
R452	061T0603100 0F	RST CHIPR 100 OHM +-1% 1/10W
R453	061T0603100 0F	RST CHIPR 100 OHM +-1% 1/10W
R717	061T0603100 1F	RST CHIPR 1 KOHM +-1% 1/10W
R735	061T0603100 2F	RST CHIPR 10KOHM +-1% 1/10W
R482	061T0603101	CHIP 100OHM 1/16W
R483	061T0603101	CHIP 100OHM 1/16W
R484	061T0603101	CHIP 100OHM 1/16W
R490	061T0603101	CHIP 100OHM 1/16W
R4B5	061T0603101	CHIP 100OHM 1/16W
R611	061T0603101	CHIP 100OHM 1/16W
R613	061T0603101	CHIP 100OHM 1/16W
R615	061T0603101	CHIP 100OHM 1/16W
R616	061T0603101	CHIP 100OHM 1/16W
R646	061T0603101	CHIP 100OHM 1/16W
R648	061T0603101	CHIP 100OHM 1/16W
R649	061T0603101	CHIP 100OHM 1/16W
R701	061T0603101	CHIP 100OHM 1/16W
R702	061T0603101	CHIP 100OHM 1/16W
R206	061T0603101	CHIP 100OHM 1/16W
R207	061T0603101	CHIP 100OHM 1/16W
R268	061T0603101	CHIP 100OHM 1/16W
R270	061T0603101	CHIP 100OHM 1/16W
R273	061T0603101	CHIP 100OHM 1/16W
R283	061T0603101	CHIP 100OHM 1/16W
R291	061T0603101	CHIP 100OHM 1/16W
R427	061T0603101	CHIP 100OHM 1/16W
R429	061T0603101	CHIP 100OHM 1/16W
R454	061T0603101	CHIP 100OHM 1/16W
R478	061T0603101	CHIP 100OHM 1/16W



R479	061T0603101	CHIP 100OHM 1/16W
R480	061T0603101	CHIP 100OHM 1/16W
R481	061T0603101	CHIP 100OHM 1/16W
R216	061T0603102	CHIP 1K OHM 1/16W
R271	061T0603102	CHIP 1K OHM 1/16W
R272	061T0603102	CHIP 1K OHM 1/16W
R403	061T0603102	CHIP 1K OHM 1/16W
R405	061T0603102	CHIP 1K OHM 1/16W
R406	061T0603102	CHIP 1K OHM 1/16W
R464	061T0603102	CHIP 1K OHM 1/16W
R504	061T0603102	CHIP 1K OHM 1/16W
R509	061T0603102	CHIP 1K OHM 1/16W
R519	061T0603102	CHIP 1K OHM 1/16W
R528	061T0603102	CHIP 1K OHM 1/16W
R695	061T0603102	CHIP 1K OHM 1/16W
R713	061T0603102	CHIP 1K OHM 1/16W
R2A2	061T0603102	CHIP 1K OHM 1/16W
R2A3	061T0603102	CHIP 1K OHM 1/16W
R269	061T0603102	CHIP 1K OHM 1/16W
R486	061T0603103	CHIP 10KOHM 1/16W
R477	061T0603103	CHIP 10KOHM 1/16W
R476	061T0603103	CHIP 10KOHM 1/16W
R475	061T0603103	CHIP 10KOHM 1/16W
R474	061T0603103	CHIP 10KOHM 1/16W
R473	061T0603103	CHIP 10KOHM 1/16W
R472	061T0603103	CHIP 10KOHM 1/16W
R471	061T0603103	CHIP 10KOHM 1/16W
R424	061T0603103	CHIP 10KOHM 1/16W
R205	061T0603103	CHIP 10KOHM 1/16W
R204	061T0603103	CHIP 10KOHM 1/16W
R688	061T0603103	CHIP 10KOHM 1/16W
R690	061T0603103	CHIP 10KOHM 1/16W
R714	061T0603103	CHIP 10KOHM 1/16W
R715	061T0603103	CHIP 10KOHM 1/16W
R723	061T0603103	CHIP 10KOHM 1/16W
R686	061T0603103	CHIP 10KOHM 1/16W
R659	061T0603103	CHIP 10KOHM 1/16W
R658	061T0603103	CHIP 10KOHM 1/16W
R629	061T0603103	CHIP 10KOHM 1/16W
R524	061T0603103	CHIP 10KOHM 1/16W
R523	061T0603103	CHIP 10KOHM 1/16W
R521	061T0603103	CHIP 10KOHM 1/16W
R520	061T0603103	CHIP 10KOHM 1/16W
R515	061T0603103	CHIP 10KOHM 1/16W
R514	061T0603103	CHIP 10KOHM 1/16W
R505	061T0603103	CHIP 10KOHM 1/16W
R493	061T0603103	CHIP 10KOHM 1/16W
R492	061T0603103	CHIP 10KOHM 1/16W
R489	061T0603103	CHIP 10KOHM 1/16W
R488	061T0603103	CHIP 10KOHM 1/16W
R487	061T0603103	CHIP 10KOHM 1/16W
R728	061T0603103	CHIP 10KOHM 1/16W
R729	061T0603103	CHIP 10KOHM 1/16W
R730	061T0603103	CHIP 10KOHM 1/16W
ZD230	061T0603103	CHIP 10KOHM 1/16W
R694	061T0603104	CHIP 100K OHM 1/16W
R689	061T0603104	CHIP 100K OHM 1/16W

R684	061T0603104	CHIP 100K OHM 1/16W
R682	061T0603104	CHIP 100K OHM 1/16W
R679	061T0603104	CHIP 100K OHM 1/16W
R678	061T0603104	CHIP 100K OHM 1/16W
R660	061T0603104	CHIP 100K OHM 1/16W
R251	061T0603104	CHIP 100K OHM 1/16W
R250	061T0603104	CHIP 100K OHM 1/16W
R249	061T0603104	CHIP 100K OHM 1/16W
R248	061T0603104	CHIP 100K OHM 1/16W
R247	061T0603104	CHIP 100K OHM 1/16W
R246	061T0603104	CHIP 100K OHM 1/16W
R683	061T0603105	CHIP 1MOHM 1/16W
R662	061T0603105	CHIP 1MOHM 1/16W
R428	061T0603105	CHIP 1MOHM 1/16W
R722	061T0603120 1F	RST CHIPR 1.2 KOHM +-1% 1/10W
R711	061T0603150 2F	RST CHIPR 15 KOHM +-1% 1/10W
R214	061T0603153	RST CHIPR 15 KOHM +-5% 1/10W
R718	061T0603200 1F	RST CHIPR 2 KOHM +-1% 1/10W
R4A5	061T0603201	RST CHIPR 200 OHM +-5% 1/10W
R211	061T0603202	RST CHIPR 2 KOHM +-5% 1/10W
R213	061T0603220	CHIP 22OHM 1/16W
R671	061T0603221	CHIP 220OHM 1/16W
R672	061T0603221	CHIP 220OHM 1/16W
R274	061T0603222	CHIP 2.2K OHM 1/16W
R275	061T0603222	CHIP 2.2K OHM 1/16W
R522	061T0603222	CHIP 2.2K OHM 1/16W
R639	061T0603222	CHIP 2.2K OHM 1/16W
R663	061T0603223	CHIP 22KOHM 1/16W
R669	061T0603223	CHIP 22KOHM 1/16W
R716	061T0603223	CHIP 22KOHM 1/16W
R726	061T0603223	CHIP 22KOHM 1/16W
R731	061T0603223	CHIP 22KOHM 1/16W
R693	061T0603224	RST CHIPR 220 KOHM +-5% 1/10W
R457	061T0603270	RST CHIPR 27 OHM +-5% 1/10W
R712	061T0603300 2F	RST CHIPR 30 KOHM +-1% 1/10W
R459	061T0603301	RST CHIPR 300OHM +-5% 1/10W
R243	061T0603330	CHIP 33OHM 1/16W
R242	061T0603330	CHIP 33OHM 1/16W
R234	061T0603330	CHIP 33OHM 1/16W
R233	061T0603330	CHIP 33OHM 1/16W
R230	061T0603330	CHIP 33OHM 1/16W
R227	061T0603330	CHIP 33OHM 1/16W
R226	061T0603330	CHIP 33OHM 1/16W
R225	061T0603330	CHIP 33OHM 1/16W
R222	061T0603330	CHIP 33OHM 1/16W
R221	061T0603330	CHIP 33OHM 1/16W
R258	061T0603330	CHIP 33OHM 1/16W
R4A4	061T0603330	CHIP 33OHM 1/16W
R495	061T0603330	CHIP 33OHM 1/16W
R494	061T0603330	CHIP 33OHM 1/16W
R2D6	061T0603330	CHIP 33OHM 1/16W
R2D5	061T0603330	CHIP 33OHM 1/16W
R2D4	061T0603330	CHIP 33OHM 1/16W
R2D3	061T0603330	CHIP 33OHM 1/16W
R2D2	061T0603330	CHIP 33OHM 1/16W
R2D1	061T0603330	CHIP 33OHM 1/16W
R298	061T0603330	CHIP 33OHM 1/16W

R297	061T0603330	CHIP 33OHM 1/16W
R290	061T0603330	CHIP 33OHM 1/16W
R286	061T0603330	CHIP 33OHM 1/16W
R285	061T0603330	CHIP 33OHM 1/16W
R284	061T0603330	CHIP 33OHM 1/16W
R282	061T0603330	CHIP 33OHM 1/16W
R263	061T0603330	CHIP 33OHM 1/16W
R262	061T0603330	CHIP 33OHM 1/16W
R259	061T0603330	CHIP 33OHM 1/16W
R449	061T0603330 1F	RST CHIPR 3.3 KOHM +-1% 1/10W
R734	061T0603330 2F	RST CHIPR 33 KOHM +-1% 1/10W
R536	061T0603331	RST CHIPR 330 OHM +-5% 1/10W
R537	061T0603331	RST CHIPR 330 OHM +-5% 1/10W
R498	061T0603332	RST CHIPR 3.3 KOHM +-5% 1/10W
R499	061T0603332	RST CHIPR 3.3 KOHM +-5% 1/10W
R733	061T0603332	RST CHIPR 3.3 KOHM +-5% 1/10W
R666	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R665	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R257	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R256	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R255	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R254	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R253	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R252	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R212	061T0603333	RST CHIPR 33 KOHM +-5% 1/10W
R640	061T0603339	RST CHIPR 3.3 OHM +-5% 1/10W
R651	061T0603339	RST CHIPR 3.3 OHM +-5% 1/10W
R413	061T06033401FY	RST CHIPR 3.4KOHM +-1% 1/10W YAGEO
R237	061T0603348 0F	RST CHIPR 348 OHM +-1% 1/10W
R510	061T0603390 0F	RST CHIPR 390 OHM +-1% 1/10W
R525	061T0603390 0F	RST CHIPR 390 OHM +-1% 1/10W
R512	061T0603392	CHIP 3.9KOHM 1/16W
R436	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
R423	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
R422	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
R421	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
R410	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
R201	061T0603470	RST CHIPR 47 OHM +-5% 1/10W
R496	061T0603471	RST CHIPR 470OHM +-5% 1/10W
R497	061T0603471	RST CHIPR 470OHM +-5% 1/10W
R210	061T0603472	CHIP 4.7KOHM 1/16W
R293	061T0603472	CHIP 4.7KOHM 1/16W
R294	061T0603472	CHIP 4.7KOHM 1/16W
R401	061T0603472	CHIP 4.7KOHM 1/16W
R404	061T0603472	CHIP 4.7KOHM 1/16W
R511	061T0603472	CHIP 4.7KOHM 1/16W
R732	061T0603472	CHIP 4.7KOHM 1/16W
R4A9	061T0603472	CHIP 4.7KOHM 1/16W
R4A8	061T0603472	CHIP 4.7KOHM 1/16W
R442	061T0603472	CHIP 4.7KOHM 1/16W
R441	061T0603472	CHIP 4.7KOHM 1/16W
R431	061T0603472	CHIP 4.7KOHM 1/16W
R430	061T0603472	CHIP 4.7KOHM 1/16W
R426	061T0603472	CHIP 4.7KOHM 1/16W
R407	061T0603472	CHIP 4.7KOHM 1/16W
R409	061T0603472	CHIP 4.7KOHM 1/16W
R414	061T0603472	CHIP 4.7KOHM 1/16W

R416	061T0603472	CHIP 4.7KOHM 1/16W
R417	061T0603472	CHIP 4.7KOHM 1/16W
R418	061T0603472	CHIP 4.7KOHM 1/16W
R419	061T0603472	CHIP 4.7KOHM 1/16W
R425	061T0603472	CHIP 4.7KOHM 1/16W
R2A1	061T0603473	CHIP 47KOHM 1/16W
R667	061T0603473	CHIP 47KOHM 1/16W
R668	061T0603473	CHIP 47KOHM 1/16W
R675	061T0603473	CHIP 47KOHM 1/16W
R676	061T0603473	CHIP 47KOHM 1/16W
R677	061T0603473	CHIP 47KOHM 1/16W
R681	061T0603473	CHIP 47KOHM 1/16W
R724	061T0603473	CHIP 47KOHM 1/16W
R725	061T0603473	CHIP 47KOHM 1/16W
R299	061T0603473	CHIP 47KOHM 1/16W
R265	061T0603473	CHIP 47KOHM 1/16W
R264	061T0603473	CHIP 47KOHM 1/16W
R261	061T0603473	CHIP 47KOHM 1/16W
R260	061T0603473	CHIP 47KOHM 1/16W
R245	061T0603473	CHIP 47KOHM 1/16W
R244	061T0603473	CHIP 47KOHM 1/16W
R239	061T0603473	CHIP 47KOHM 1/16W
R238	061T0603473	CHIP 47KOHM 1/16W
R458	061T0603510	RST CHIPR 51 OHM +-5% 1/10W
R202	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
R203	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
R527	061T0603512	RST CHIPR 5.1 KOHM +-5% 1/10W
R450	061T0603620 2F	RST CHIPR 62 KOHM +-1% 1/10W
R508	061T0603682	RST CHIPR 6.8KOHM +-5% 1/10W
R680	061T0603684	RST CHIPR 680 KOHM +-5% 1/10W
R685	061T0603684	RST CHIPR 680 KOHM +-5% 1/10W
R448	061T0603750	75OHM
R215	061T0603750	75OHM
R209	061T0603750 9F	CHIP 75OHM 1/16W 1%
R223	061T0603750 9F	CHIP 75OHM 1/16W 1%
R224	061T0603750 9F	CHIP 75OHM 1/16W 1%
R228	061T0603750 9F	CHIP 75OHM 1/16W 1%
R229	061T0603750 9F	CHIP 75OHM 1/16W 1%
R231	061T0603750 9F	CHIP 75OHM 1/16W 1%
R232	061T0603750 9F	CHIP 75OHM 1/16W 1%
R279	061T0603750 9F	CHIP 75OHM 1/16W 1%
R280	061T0603750 9F	CHIP 75OHM 1/16W 1%
R281	061T0603750 9F	CHIP 75OHM 1/16W 1%
R2C5	061T0603750 9F	CHIP 75OHM 1/16W 1%
R2C6	061T0603750 9F	CHIP 75OHM 1/16W 1%
R2C7	061T0603750 9F	CHIP 75OHM 1/16W 1%
R2C8	061T0603750 9F	CHIP 75OHM 1/16W 1%
R2C9	061T0603750 9F	CHIP 75OHM 1/16W 1%
R507	061T0603752	RST CHIPR 7.5 KOHM +-5% 1/10W
R506	061T0603752	RST CHIPR 7.5 KOHM +-5% 1/10W
R503	061T0603752	RST CHIPR 7.5 KOHM +-5% 1/10W
R502	061T0603752	RST CHIPR 7.5 KOHM +-5% 1/10W
R463	061T0603821	RST CHIPR 820 OHM +-5% 1/10W
R692	061T0603821	RST CHIPR 820 OHM +-5% 1/10W
R4B1	061T0603822	RST CHIPR 8.2 KOHM +-5% 1/10W
R446	061T0603845 0F	RST CHIPR 0603 845R 1/10W 1%
R447	061T0603845 0F	RST CHIPR 0603 845R 1/10W 1%

R720	061T0805560 1F	RST CHIPR 5.6 KOHM +-1% 1/8W
R736	061T1206000	RST CHIPR 0 OHM +-5% 1/4W
R737	061T1206000	RST CHIPR 0 OHM +-5% 1/4W
R633	061T1206220	RST CHIPR 22 OHM +-5% 1/4W
R653	061T1206220	RST CHIPR 22 OHM +-5% 1/4W
R636	061T1206629	RST CHIP 6R2 1/4W 5%
R641	061T1206629	RST CHIP 6R2 1/4W 5%
R654	061T1206629	RST CHIP 6R2 1/4W 5%
R657	061T1206629	RST CHIP 6R2 1/4W 5%
C470	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C469	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C468	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C467	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C466	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C465	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C464	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C463	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C406	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C409	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C411	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C413	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C414	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C451	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C453	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C455	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C456	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C460	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C459	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C458	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C471	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C491	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C494	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C495	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C496	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C497	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C498	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C499	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C4A1	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C4A2	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C4A3	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C4A4	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C4A5	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C4C9	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C4D2	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C490	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C472	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C473	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C474	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C475	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C476	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C481	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C482	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C483	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C484	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C485	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C486	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C487	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R

C488	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C489	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C234	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C204	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C207	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C208	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C209	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C211	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C212	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C221	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C222	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C225	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C226	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C230	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C233	065T0402104 12	CAP CHIP 0402 0.1UF 16V X7R
C708	065T0603101 31	CHIP 100PF 50V NPO
C6B3	065T0603101 31	CHIP 100PF 50V NPO
C6B2	065T0603101 31	CHIP 100PF 50V NPO
C697	065T0603101 31	CHIP 100PF 50V NPO
C696	065T0603101 31	CHIP 100PF 50V NPO
C299	065T0603101 31	CHIP 100PF 50V NPO
C298	065T0603101 31	CHIP 100PF 50V NPO
C283	065T0603101 31	CHIP 100PF 50V NPO
C282	065T0603101 31	CHIP 100PF 50V NPO
C281	065T0603101 31	CHIP 100PF 50V NPO
C280	065T0603101 31	CHIP 100PF 50V NPO
C293	065T0603102 21	CHIP 1000PF 25V NPO
C289	065T0603102 21	CHIP 1000PF 25V NPO
C217	065T0603102 31	CHIP 1000PF 50V NPO
C223	065T0603102 31	CHIP 1000PF 50V NPO
C665	065T0603102 32	CHIP 1000PF 50V X7R
C667	065T0603102 32	CHIP 1000PF 50V X7R
C670	065T0603102 32	CHIP 1000PF 50V X7R
C683	065T0603102 32	CHIP 1000PF 50V X7R
C685	065T0603102 32	CHIP 1000PF 50V X7R
C688	065T0603102 32	CHIP 1000PF 50V X7R
C693	065T0603102 32	CHIP 1000PF 50V X7R
C734	065T0603102 32	CHIP 1000PF 50V X7R
C724	065T0603102 32	CHIP 1000PF 50V X7R
C717	065T0603102 32	CHIP 1000PF 50V X7R
C699	065T0603102 32	CHIP 1000PF 50V X7R
C657	065T0603102 32	CHIP 1000PF 50V X7R
C653	065T0603102 32	CHIP 1000PF 50V X7R
C652	065T0603102 32	CHIP 1000PF 50V X7R
C457	065T0603102 32	CHIP 1000PF 50V X7R
C454	065T0603102 32	CHIP 1000PF 50V X7R
C450	065T0603102 32	CHIP 1000PF 50V X7R
C412	065T0603102 32	CHIP 1000PF 50V X7R
C410	065T0603102 32	CHIP 1000PF 50V X7R
C408	065T0603102 32	CHIP 1000PF 50V X7R
C407	065T0603102 32	CHIP 1000PF 50V X7R
C214	065T0603102 32	CHIP 1000PF 50V X7R
C203	065T0603102 32	CHIP 1000PF 50V X7R
C452	065T0603103 12	CHIP 0.01UF 16V X7R
C620	065T0603103 12	CHIP 0.01UF 16V X7R
C621	065T0603103 12	CHIP 0.01UF 16V X7R
C655	065T0603103 12	CHIP 0.01UF 16V X7R

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C643	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C645	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C646	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C647	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C658	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C673	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C674	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C680	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C681	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C6B1	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C6B4	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C6B5	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C702	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C295	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C292	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C291	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C290	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C270	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C268	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C260	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C256	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C255	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C250	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C248	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C244	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C243	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C236	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C215	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C201	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C434	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C433	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C432	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C431	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C430	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C429	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C428	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C427	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C2B5	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C2B6	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C2B7	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C403	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C422	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C423	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C425	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C426	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C764	065T0603104 12 GP	CHIP 0.1UF 16V X7R
C679	065T0603104 32	CHIP 0.1UF 50V X7R
C682	065T0603104 32	CHIP 0.1UF 50V X7R
C686	065T0603104 32	CHIP 0.1UF 50V X7R
C689	065T0603104 32	CHIP 0.1UF 50V X7R
C746	065T0603104 32	CHIP 0.1UF 50V X7R
C744	065T0603104 32	CHIP 0.1UF 50V X7R
C723	065T0603104 32	CHIP 0.1UF 50V X7R
C716	065T0603104 32	CHIP 0.1UF 50V X7R
C690	065T0603104 32	CHIP 0.1UF 50V X7R
C678	065T0603104 32	CHIP 0.1UF 50V X7R
C449	065T0603104 32	CHIP 0.1UF 50V X7R



C461	065T0603104 32	CHIP 0.1UF 50V X7R
C660	065T0603104 32	CHIP 0.1UF 50V X7R
C661	065T0603104 32	CHIP 0.1UF 50V X7R
C664	065T0603104 32	CHIP 0.1UF 50V X7R
C668	065T0603104 32	CHIP 0.1UF 50V X7R
C671	065T0603104 32	CHIP 0.1UF 50V X7R
C672	065T0603104 32	CHIP 0.1UF 50V X7R
C235	065T0603105 12	CHIP 1UF 16V X7R
C415	065T0603105 12	CHIP 1UF 16V X7R
C477	065T0603105 12	CHIP 1UF 16V X7R
C478	065T0603105 12	CHIP 1UF 16V X7R
C492	065T0603105 12	CHIP 1UF 16V X7R
C4A6	065T0603105 12	CHIP 1UF 16V X7R
C4D3	065T0603105 12	CHIP 1UF 16V X7R
C614	065T0603105 17	CHIP 1UF 16V Y5V
C615	065T0603105 17	CHIP 1UF 16V Y5V
C691	065T0603105 17	CHIP 1UF 16V Y5V
C692	065T0603105 17	CHIP 1UF 16V Y5V
C698	065T0603105 17	CHIP 1UF 16V Y5V
C6B6	065T0603105 17	CHIP 1UF 16V Y5V
C766	065T0603181 31	MLCC 0603 180PF J 50V NPO
C205	065T0603220 31	CHIP 22PF 50V NPO
C206	065T0603220 31	CHIP 22PF 50V NPO
C695	065T0603221 32	CHIP 220PF 50V X7R
C694	065T0603221 32	CHIP 220PF 50V X7R
C297	065T0603224 22	CHIP CAP 0.22UF 25V X7
C402	065T0603224 22	CHIP CAP 0.22UF 25V X7
C656	065T0603224 22	CHIP CAP 0.22UF 25V X7
C758	065T0603224 22	CHIP CAP 0.22UF 25V X7
C759	065T0603224 22	CHIP CAP 0.22UF 25V X7
C760	065T0603224 22	CHIP CAP 0.22UF 25V X7
C286	065T0603224 22	CHIP CAP 0.22UF 25V X7
C287	065T0603224 22	CHIP CAP 0.22UF 25V X7
C288	065T0603224 22	CHIP CAP 0.22UF 25V X7
C709	065T0603225 A5	CHIP 2.2UF 10V X5R
C649	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C648	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C638	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C637	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C629	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C628	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C625	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C624	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C619	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C618	065T0603225A5K Y	CAP CHIP 0603 2.2UF K 10V X5R
C631	065T0603270 31	CHIP 27PF 50V NPO
C636	065T0603270 31	CHIP 27PF 50V NPO
C640	065T0603270 31	CHIP 27PF 50V NPO
C641	065T0603270 31	CHIP 27PF 50V NPO
C642	065T0603270 31	CHIP 27PF 50V NPO
C650	065T0603270 31	CHIP 27PF 50V NPO
C651	065T0603270 31	CHIP 27PF 50V NPO
C630	065T0603270 31	CHIP 27PF 50V NPO
C627	065T0603270 31	CHIP 27PF 50V NPO
C626	065T0603270 31	CHIP 27PF 50V NPO
C623	065T0603270 31	CHIP 27PF 50V NPO
C622	065T0603270 31	CHIP 27PF 50V NPO

C617	065T0603270 31	CHIP 27PF 50V NPO
C616	065T0603270 31	CHIP 27PF 50V NPO
C4C1	065T0603300 31	CHIP 0603 30PF J 50V NPO
C4B9	065T0603300 31	CHIP 0603 30PF J 50V NPO
C405	065T0603300 31	CHIP 0603 30PF J 50V NPO
C404	065T0603330 31	CHIP 33PF 50V NPO
C6A4	065T0603331 32	CHIP 330PF 50V X7R
C6A3	065T0603331 32	CHIP 330PF 50V X7R
C687	065T0603331 32	CHIP 330PF 50V X7R
C669	065T0603331 32	CHIP 330PF 50V X7R
C765	065T0603332 32	CHIP 3300PF 50V X7R
C417	065T0603392 32	CHIP 3900PF 50V X7R
C416	065T0603393 32	CHIP 0.039UF 50V X7R
C261	065T0603470 31	CHIP 47PF 50V NPO
C258	065T0603470 31	CHIP 47PF 50V NPO
C257	065T0603470 31	CHIP 47PF 50V NPO
C251	065T0603470 31	CHIP 47PF 50V NPO
C249	065T0603470 31	CHIP 47PF 50V NPO
C246	065T0603470 31	CHIP 47PF 50V NPO
C245	065T0603470 31	CHIP 47PF 50V NPO
C279	065T0603470 32	CHIP 47PF 50V X7R
C278	065T0603470 32	CHIP 47PF 50V X7R
C277	065T0603470 32	CHIP 47PF 50V X7R
C267	065T0603470 32	CHIP 47PF 50V X7R
C266	065T0603470 32	CHIP 47PF 50V X7R
C265	065T0603470 32	CHIP 47PF 50V X7R
C247	065T0603470 32	CHIP 47PF 50V X7R
C242	065T0603470 32	CHIP 47PF 50V X7R
C241	065T0603470 32	CHIP 47PF 50V X7R
C202	065T0603470 32	CHIP 47PF 50V X7R
C6A6	065T0603471 32	CHIP 470PF 50V NPO
C6A5	065T0603471 32	CHIP 470PF 50V NPO
C676	065T0603472 32	CHIP 4700PF 50V X7R
C421	065T0603474 12	CHIP 0.47UF 16V X7R
C677	065T0603681 21	CHIP 680PF 25V NPO
C220	065T0603820 31	0603 82PF +-5%, 50V NPO
C663	065T0805105 37	CHIP 1UF 50V Y5V
C662	065T0805105 37	CHIP 1UF 50V Y5V
C774	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C770	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C710	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C4D4	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C420	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C419	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C418	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C269	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C231	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C210	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C633	065T1206106 17	CHIP 10UF 16V Y5V
C635	065T1206106 17	CHIP 10UF 16V Y5V
C479	065T120610612K 3	CHIP 10UF 16V X7R 10%
C480	065T120610612K 3	CHIP 10UF 16V X7R 10%
C493	065T120610612K 3	CHIP 10UF 16V X7R 10%
C4A7	065T120610612K 3	CHIP 10UF 16V X7R 10%
C4A8	065T120610612K 3	CHIP 10UF 16V X7R 10%
FB409	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB410	071T 56G301 EA	CHIP BEAD 300 OHM 0805

FB411	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB412	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB413	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB610	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB611	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB408	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB407	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB404	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB403	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB402	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB401	071T 56G301 EA	CHIP BEAD 300 OHM 0805
FB608	071T 56V301 B	CHIP BEAD 0805 300OHM 700MA BULLWILL
FB607	071T 56Z601	CHIP BEAD 600 OHM
FB606	071T 56Z601	CHIP BEAD 600 OHM
FB707	071T 57G301 EA	CHIP BEAD
FB706	071T 57G301 EA	CHIP BEAD
FB704	071T 57G301 EA	CHIP BEAD
FB703	071T 57G301 EA	CHIP BEAD
FB406	071T 57G301 EA	CHIP BEAD
FB208	071T 59B121	BEAD 0603 120 OHM
FB211	071T 59B121	BEAD 0603 120 OHM
FB212	071T 59B121	BEAD 0603 120 OHM
FB213	071T 59B121	BEAD 0603 120 OHM
FB219	071T 59B121	BEAD 0603 120 OHM
FB414	071T 59B121	BEAD 0603 120 OHM
FB609	071T 59B121	BEAD 0603 120 OHM
FB702	071T 59B121	BEAD 0603 120 OHM
FB202	071T 59B121	BEAD 0603 120 OHM
FB204	071T 59B121	BEAD 0603 120 OHM
FB205	071T 59B121	BEAD 0603 120 OHM
FB207	071T 59B121	BEAD 0603 120 OHM
FB203	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB206	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB234	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB235	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB236	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB708	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB709	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB710	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB711	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB712	071T 59B601 EA	CHIP BEAD 600OHM 0603 TB1608
FB222	071T 59C300	CHIP BEAD 30 OHM 0603
FB221	071T 59C300	CHIP BEAD 30 OHM 0603
FB220	071T 59C300	CHIP BEAD 30 OHM 0603
FB218	071T 59C300	CHIP BEAD 30 OHM 0603
FB217	071T 59C300	CHIP BEAD 30 OHM 0603
FB216	071T 59C300	CHIP BEAD 30 OHM 0603
FB229	071T 59C800	CHIP BEAD
FB228	071T 59C800	CHIP BEAD
FB227	071T 59C800	CHIP BEAD
FB231	071T 59G301	CHIP BEAD 300OHM
FB230	071T 59G301	CHIP BEAD 300OHM
FB226	071T 59G301	CHIP BEAD 300OHM
FB225	071T 59G301	CHIP BEAD 300OHM
FB224	071T 59G301	CHIP BEAD 300OHM
FB223	071T 59G301	CHIP BEAD 300OHM
FB215	071T 59G301	CHIP BEAD 300OHM

FB214	071T 59G301	CHIP BEAD 300OHM
FB210	071T 59G301	CHIP BEAD 300OHM
FB209	071T 59G301	CHIP BEAD 300OHM
L605	071T160833102Y	CHIP BEAD 0603 330OHM
L606	071T160833102Y	CHIP BEAD 0603 330OHM
FB605	071T2012221 2Y	CHIP BEAD 0805 220OHM
FB604	071T2012221 2Y	CHIP BEAD 0805 220OHM
FB603	071T2012221 2Y	CHIP BEAD 0805 220OHM
FB602	071T2012221 2Y	CHIP BEAD 0805 220OHM
FB601	071T2012221 2Y	CHIP BEAD 0805 220OHM
L201	073T 57228	CHIP INDUCTOR 0805 0.22UH+-10% JKMT
L203	073T 57228	CHIP INDUCTOR 0805 0.22UH+-10% JKMT
L202	073T 8515810K	CHIP INDUCTOR 0.15UH 10% 0805
L703	073T253S 4 B	IND SMD 10UH 3.4A SPD8D43PT100M BULLWILL
L702	073T253S 46 K	SMD CHOKE BS-0504CDSU-4R7MT 4.7UH
F402	084T 52 15 B GP	CHIP FUSE 1.0A 63V
CN503	088T 340 19CHA	HDMI HEADER 19P 0471518121
CN502	088T 340 21 VN	HDMI HEADER 21P V/A
CN501	088T 340 21 VN	HDMI HEADER 21P V/A
ZD232	093T 60230	BAT54C BY MCC
ZD216	093T 64 37 N	V-PORT-0603-100K V05
ZD215	093T 64 37 N	V-PORT-0603-100K V05
ZD214	093T 64 37 N	V-PORT-0603-100K V05
ZD213	093T 64 37 N	V-PORT-0603-100K V05
ZD503	093T 64 37 N	V-PORT-0603-100K V05
ZD502	093T 64 37 N	V-PORT-0603-100K V05
ZD501	093T 64 37 N	V-PORT-0603-100K V05
ZD413	093T 64 37 N	V-PORT-0603-100K V05
ZD217	093T 64 37 N	V-PORT-0603-100K V05
ZD218	093T 64 37 N	V-PORT-0603-100K V05
ZD219	093T 64 37 N	V-PORT-0603-100K V05
ZD220	093T 64 37 N	V-PORT-0603-100K V05
ZD221	093T 64 37 N	V-PORT-0603-100K V05
ZD222	093T 64 37 N	V-PORT-0603-100K V05
ZD223	093T 64 37 N	V-PORT-0603-100K V05
ZD224	093T 64 37 N	V-PORT-0603-100K V05
ZD412	093T 64 37 N	V-PORT-0603-100K V05
ZD228	093T 64 37 N	V-PORT-0603-100K V05
ZD229	093T 64 37 N	V-PORT-0603-100K V05
ZD231	093T 64 37 N	V-PORT-0603-100K V05
ZD233	093T 64 37 N	V-PORT-0603-100K V05
ZD234	093T 64 37 N	V-PORT-0603-100K V05
ZD237	093T 64 37 N	V-PORT-0603-100K V05
ZD238	093T 64 37 N	V-PORT-0603-100K V05
ZD239	093T 64 37 N	V-PORT-0603-100K V05
ZD240	093T 64 37 N	V-PORT-0603-100K V05
ZD241	093T 64 37 N	V-PORT-0603-100K V05
ZD242	093T 64 37 N	V-PORT-0603-100K V05
ZD243	093T 64 37 N	V-PORT-0603-100K V05
ZD403	093T 64 37 N	V-PORT-0603-100K V05
ZD404	093T 64 37 N	V-PORT-0603-100K V05
ZD405	093T 64 37 N	V-PORT-0603-100K V05
ZD406	093T 64 37 N	V-PORT-0603-100K V05
ZD227	093T 64 37 N	V-PORT-0603-100K V05
ZD411	093T 64 37 N	V-PORT-0603-100K V05
ZD410	093T 64 37 N	V-PORT-0603-100K V05

ZD409	093T 64 37 N	V-PORT-0603-100K V05
ZD408	093T 64 37 N	V-PORT-0603-100K V05
ZD407	093T 64 37 N	V-PORT-0603-100K V05
ZD506	093T 64 37 N	V-PORT-0603-100K V05
ZD505	093T 64 37 N	V-PORT-0603-100K V05
ZD504	093T 64 37 N	V-PORT-0603-100K V05
ZD605	093T 64 37 N	V-PORT-0603-100K V05
ZD604	093T 64 37 N	V-PORT-0603-100K V05
ZD603	093T 64 37 N	V-PORT-0603-100K V05
ZD602	093T 64 37 N	V-PORT-0603-100K V05
ZD601	093T 64 37 N	V-PORT-0603-100K V05
ZD507	093T 64 37 N	V-PORT-0603-100K V05
ZD225	093T 64 37 N	V-PORT-0603-100K V05
ZD226	093T 64 37 N	V-PORT-0603-100K V05
ZD201	093T 64 37 N	V-PORT-0603-100K V05
ZD202	093T 64 37 N	V-PORT-0603-100K V05
ZD203	093T 64 37 N	V-PORT-0603-100K V05
ZD204	093T 64 37 N	V-PORT-0603-100K V05
ZD205	093T 64 37 N	V-PORT-0603-100K V05
ZD206	093T 64 37 N	V-PORT-0603-100K V05
ZD207	093T 64 37 N	V-PORT-0603-100K V05
ZD208	093T 64 37 N	V-PORT-0603-100K V05
ZD209	093T 64 37 N	V-PORT-0603-100K V05
ZD210	093T 64 37 N	V-PORT-0603-100K V05
ZD211	093T 64 37 N	V-PORT-0603-100K V05
ZD212	093T 64 37 N	V-PORT-0603-100K V05
D701	093T 6432P	LL4148 BY PANJIT
D606	093T 6432P	LL4148 BY PANJIT
D605	093T 6432P	LL4148 BY PANJIT
D604	093T 6432P	LL4148 BY PANJIT
D603	093T 6432P	LL4148 BY PANJIT
D403	093T 6432P	LL4148 BY PANJIT
ZD701	093T3004 3	SM340A DO-214AC BY SECOS
ZD702	093T3004 3	SM340A DO-214AC BY SECOS
ZD703	093T3004 3	SM340A DO-214AC BY SECOS
	715T2830 F	MAIN BOARD PCB FR-4 193X225X1.6MM 1OZ 4-LAYS
U712	056T 563135	IC G952T24UF SOT-89
C711	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C771	065T0603104 12	MLCC 0603 0.1UF K 16V X7R
C772	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C738	065T1206226 A7	CHIP 1206 22UF Z 10V
C703	065T0805475A2K M	MLCC 0805 CAP 4.7UF 10V X7R
C773	065T0603105 A7	CHIP 1UF 10V Y5V
R4B7	061T0603202	RST CHIPR 2 KOHM +-5% 1/10W
ZD704	093T3004 3	SM340A DO-214AC BY SECOS
C737	065T0603102 21	CHIP 1000PF 25V NPO